THE

Harveian Oration.

DELIVERED AT THE

ROYAL COLLEGE OF PHYSICIANS, LONDON,

June 24th, 1870.

BY WILLIAM GULL, M.D., F.R.S.

MR. PRESIDENT AND FELLOWS,—"Once in a year there shall be given a solemn oration to commemorate the benefactors of the College, and to encourage its members to search out the secrets of nature by way of experiment."

This was the express wish of Harvey, and for the annual fulfilment of it he duly provided. It is this occasion which, after more than two centuries, calls us together to-day. Had I not felt it a duty to comply with the request of our President to deliver this oration, I should gladly have put aside the task thus devolving upon me, feeling as I do very deeply the responsibility of undertaking it. But by doing so I felt I should incur greater blame than by failing in a faithful attempt, however feeble, to perform it. To have shrunk from this duty would have involved a seeming unreadiness to do my best, and an apparent neglect of the command of Harvey, whose immortal name confers not only the highest honour upon our country, but an undying distinction upon this College.

We have not met to-day to do honour to Harvey by landing again the splendour of his discoveries, or to justify the scientific method he employed in making them. This has been done so repeatedly and so well in this place that it would be both superfluous and presumptuous to go over the ground again. My duty is rather to fulfil, as far as lies in my power, Harvey's intention in instituting this oration by moving your minds to a consideration of our position as students of medicine, and to encourage a further search into nature's mysteries.

The science of medicine, being the science of man (in health and disease), must occupy the central place in human knowledge—physics and metaphysics being the poles of his existence, and the social sciences comprising his history. But it may be asked if our minds are made up as to whether man is altogether an object of scientific study or not; whether the mysteries of his organisation are fairly subjects admitting of investigation; and, therefore, whether it is becoming in the Harveian orator to stir up your minds to search these mysteries out to their fullest extent. The doubt implied is not one of my own suggesting, for I confess it seems strange to me that anyone at this day should assert that "life is a power entirely different from and in no way correlated with matter and its ordinary forces," and consequently, I may add, no proper object of science. Yet this assertion, though not the inference, comes from one amongst ourselves, who is well entitled to respect, and therefore it obliges me to a survey of our present position.

It is not thirty years since it was gravely questioned whether a living body could not generate by its vital force some of the elements of which it is composed. An organism was considered to be a creative agent, forming and transmuting the materials of its higher structures. How far the investigations of chemistry have separated us from such fictions I need not remind you; for whatever may be thought of the forces exhibited by living beings, no one would now question the origin and nature of their materials. No one at this day would even dare to hint at any transmutation of the organic elements. It appears, however, that we are not yet entirely emancipated from such conceptions; and that there is still wanting a full and implicit belief that the as yet mysterious phenomena of life are correlative with the lower forces in nature. Whilst the advances of chemistry were settling the question of material elements, physics was deeply occupied with the relations of force. These relations, which had so long engaged and perplexed logical ingenuity, still remained comparatively barren. Cause and effect were to the logician but invariable sequences, of which he could give no account. To the physicist they now became essential continuities: effect was cause in a new form; suppression and reappearance took the place of mere physical sequence. The stone which logic offered became bread in the hand of science. A boundless vista at once opened before the mind; and, instead of isolated and independent phenomena, the essential relations of all the physical forces became more or less clearly discernible, rendering it probable that as a mechanical cause in its simplest form is evolved into its effect by suppression only, or as the higher forms of heat, light, electricity, and magnetism could be equally evolved under suitable material conditions by a similar suppression, so might the organic processes in their entirety be equally correlative of the lower forces. That as the living body neither formed nor transmuted its material elements, neither was it the creative centre of an immaterial and independent organic law working within. If it is ascertained beyond all doubt that, in respect of its materials, a living body contains no more than it has received; that, however strange and mysterious its organs and their functions, the warp and woof are of substances with which we are acquainted under simpler conditions, cannot the same be maintained of the forces it exhibits?

To begin with the lowest series of living things. There will probably be no hesitation in admitting that the vegetable kingdom is no more than an expression in a higher form of the terrestrial conditions which even common experience proves to be in a general way necessary to vegetable life. And this admission will be freely made, though the infinite details it includes have yet to be made known. Thus the fulfilment of the Almighty fiat—"Let the earth bring forth grass, the herb yielding seed, and the fruit-tree yielding fruit after his kind"—is not the unconditioned effect of an absolute will, but the working out of that will through means laid open to the investigation of science.

To pass from the lower series to the higher, it will be equally admitted that the animal kingdom is sustained at all points by the vegetable kingdom.

That the forces exhibited in animal functions are those previously stored up in plants by assimilation is a fixed position in physiology, and so far the operation of the law of life is plain; but as we pass to a consideration of the more intimate modes of it the difficulties increase, and yet probably they are not essentially greater difficulties than such as have been overcome by the patience and docility of those whom it is my duty to commemorate on this occasion.

It may be objected that there is lurking a kind of *petitio principii* in the supposed relations of simpler forces to their higher forms; that for the conversion of the former into the latter it is necessary to postulate material conditions of a certain kind, and that for the organic conversion we must begin with a living body or its germ; that the boast of the physiologist is like the boast of Archimedes. If he wanted a πῶ στῶ, they require germs or ova and a living body. But it is clear that such an objection has no weight as in favour of a vital force which is not material, since it is abundantly proved that, whatever be the conditions required, they do not generate any power, but only vary the form of it.

They who maintain the hypothesis of a separate vital force, independent of the ordinary forces of nature, and which has no essential relation to them, do, by the very terms of the hypothesis, assume that the phenomena in living things are out of the proper range of science, and they consign us to a perpetual mental inactivity and ignorance in that region of knowledge in which above all others man is interested; and they seem to abjure that birthright which a learned physiologist has spoken of as our highest inheritance when he says: Man is not only the most wonderful creature God hath created, in the perfection of his organisation, but most in this that he hath endowed him with an intellect to understand himself. "When this height is reached, then, and not till then, will man be a perfect monument of the wisdom and power of his Maker, a created being knowing his own existence, and capable of explaining it."* An hypothesis, like that of a separate vital principle, which demands so much, which stops inquiry at once, making progress impossible, by removing the steps by which it could ascend, should at least have the highest sanction of our intellect. This, however,

* Draper's "Human Physiology," 1856, p. 26.

seems not to be so; for, says one of the acutest thinkers,* "to a reflecting mind the very fact that the powers peculiar to life *include* cohesion, elasticity, &c., that living matter exhibits these physical properties, would demonstrate that, in the truth of things, they are homogeneous, and that both the classes are but degrees and different dignities of one and the same tendency. For the latter are not subjected to the former as a lever or walking-stick to the muscles; the more intense life is, the less does *elasticity*, for instance, appear *as* elasticity. It sinks down into the nearest approach to its *physical* form by a series of degrees, from the contraction and elongation of the irritable muscle to the physical hardness of the insensitive nail. The lower powers are *assimilated*, not merely *employed*, and assimilation presupposes the homogeneous nature of the thing assimilated; else it is a miracle, because it would imply that additional and equal miracle of annihilation. In short, all the impossibilities which the acutest divines have detected in transubstantiation, would apply *totidem verbis et syllabis* to that of assimilation, if the objects and the agents were really heterogeneous. Unless therefore a thing can exhibit properties which do not belong to it, the very admission that living matter exhibits *physical* properties includes the further admission that those physical or dead properties are in themselves vital in essence, really distinct, but in appearance only different." The impassable chasm between the living and the dead, which this hypothesis of a vital force assumes, and then attempts to bridge over, appears to be a human figment, arising out of the mechanical mode by which alone man can work upon material; but, says Newton, "The main business of natural philosophy is to argue from phenomena without feigning hypotheses, and to deduce causes from effects until we come to the first cause, which certainly is not mechanical."† Science may probably never be able to give an account of the primitive germs of living things, if only because the primeval conditions of the world cannot repeat themselves for our investigation; but it is not improbable that the conception we form of germs and ova is as faulty as was that of early physiologists respecting the generation of elementary substances by organic bodies, or of that till lately generally entertained, and now entertained by some, respecting the vital forces, as if they were not terrestrial. That living things throw off at times portions of their mass, which become through a definite set of physical relations like the parent from which they sprang, is of common experience; but whether these masses, germs or ova as they may happen to be called, are as limited and specific as we have hitherto regarded them, is the *questio vexata* of the day.

That like should beget like might *à priori* be inferred from the equality of the conditions. But observation also shows that, the conditions varying, like does not necessarily beget likeness; and this variation occurs both upwards towards a higher organisation, downwards towards an extinction of it, and divergently towards variety of organic form.

The dogma "omne vivum ex ovo," for the truth of which Harvey so justly contended, against the fanciful notions of his age, cannot, perhaps, be now maintained in its integrity. Whether, to use an expression of that day, living things are ever produced automatically—that is, *de novo*—through putrefaction or otherwise, is, like the question of the limitation or universality of the germ power, still a matter upon which opinion is divided; and as it is my duty on this occasion to exhort you to investigate nature by way of experiment, I must ask you not readily to accept negative conclusions which impose limits where none may really exist. Still, it must be admitted that it is under the strictest and severest limits that nature does operate. If organisation be automatic, it is so in a deeper and higher and wider sense than the mind of man hath as yet conceived; it is a process of whose beginning we have no knowledge or conception, and the present facts of which must ever make greater and greater demands upon the intellect to fathom them; it is an operation which includes in its last developments an intellectual and a moral law,—all the infinite variety we see around us, and all that subtle world we feel within.

The time is passing in which the human mind can remain satisfied to rest under the fetters it has imposed upon itself, or to cherish its own phantasms, as if its very existence depended upon them. "Man knows only what he has observed of the course of nature" is the notorious dictum of science, showing the limit and the mode of the acquirement of our knowledge: the limit as wide as nature itself; and the mode is but readiness to be taught. Notwithstanding, therefore, the adverse decision of schools and dogmas, science still occupies itself with the possibilities of occasional automatic generation. And that it should be so, let it not raise antagonism in the minds of those whose pursuits (inquiries) lie in another direction, since the infinity of nature may well include facts which at first seem to be antagonistic.

But here, as in all search after truth, we pass between Scylla and Charybdis. On the one hand, we may not incline to those easy systems which satisfy the intellect by explanations which the imagination supposes; neither may we, on the other, give ourselves over to systems of immature science, which, whilst they seem to be carrying us forward, are but revolving us in the narrowest circles of knowledge. Mind is not mechanical, life is not chemistry, anatomy is not physiology; and I think, as the poet says, that we are not altogether magnetic mockeries. Still, as it has been stated elsewhere, the student of medicine would gladly yield up the department of knowledge in which he labours to be partitioned amongst the claimants of the collateral sciences of physics and chemistry if their claim was fairly made out; but, however much we may congratulate our fellow-labourers on the work they have accomplished, we cannot admit that their investigations have as yet approached even the confines of the organic kingdom. Physiology, in the range of animal and vegetable morphology, has done much to give us the assurance that the infinite variety of organic forms will be traced to their secondary causes. It may seem but trifling to note how vegetable symmetry is dependent upon the relations of light and moisture, and the circumambient fluids, air or water; or that leaves and flowers will be regular or not according to the varying firmness of the stem on which they are supported. But if from these observations we can be carried on to those elaborate arrangements which have been described as so admirable in their intentions as to surpass the utmost ingenuity of man to conceive, we cannot believe that there is a limit to our progress but that which our supineness or pride imposes upon us. But whilst we accept this encouragement, it is to be remarked that the explanations afforded are chiefly statical or mechanical—that they do not approach the conditions which we are accustomed to regard as in a higher sense vital. Yet, even with respect to these, as was brought before you on a former occasion, science does not shrink from the task of ultimately unveiling their mystery. "To suppose," says Darwin, "that the eye, with all its inimitable contrivances for adjusting the focus to different distances, for admitting different amounts of light, and for the correction of spherical and chromatic aberration, could have been formed by natural selection, seems, I freely confess, absurd in the highest possible degree. Yet reason tells me, that if numerous gradations, from a perfect and complex eye to one very imperfect and simple, each grade being useful to its possessor, can be shown to exist; if, further, the eye does vary ever so slightly, and the variation be inherited, which is certainly the case; and if any variation or modification in the organ be ever useful to an animal under changing conditions of life, then the difficulty of believing that a perfect and complex eye could be formed by natural selection, though insuperable by our imagination, can hardly be considered real."*

Admitting the full force of this reasoning, and though anatomy shows that the elementary eye arises by a simple involution of the integument, the difficulty is, that the same, or nearly the same, occurs for the ear; and we have no knowledge which would enable us to predict from such beginning the formation of organs so elaborate as these ultimately become, for that can hardly be called knowledge which but deals with facts by contemplation alone. We cannot be said to have acquired a clue to the idea of organic operations until we are able to try our knowledge by prediction, and to foretell what must arise under given conditions. Although, however, physiology is obliged to assume the unit of each organ, we cannot survey the rela-

* Coleridge's "Hints towards the Formation of a more Comprehensive Theory of Life." Edited by Seth Watson, M.D. 1848.

† "Optics," p. 344. 1718.

* Darwin on the Origin of Species, p. 186.

tions of organic beings throughout their whole extent without the conviction that we have before us the varied illustrations of one pervading law, reaching from the simple elements to the highest tissues and organs.

Not to occupy time by recapitulating the arguments of the Bridgewater Treatises, which, although written from another point of view, would equally prove this unity, I cannot forbear asking you for one moment to consider again this organisation of our own bodies in relation to the earth we inhabit, and then say if it be otherwise conceivable but as the expression of the highest correlation of these external conditions. But some will reply, This is admitted, and explained by the direct operation of a Divine Power upon the material, fitting one thing to another—the organ to its function, the sense to its object. Accepting to the full all that could properly be contained in this assertion, it is still to be asked, in the interests of science, that, instead of closing the inquiry, it should, on the contrary, but open it, and quicken and make patient the understanding in our search after the facts by which such results are obtained; for the operation of an infinite wisdom and power in nature does not obviate secondary causes, or explain the processes which lie between the extremes of existence. I admit that, as Darwin says, the imagination fails to conceive the means in their operation, and that it would rather avoid the labour of inquiry. But if, in the study of natural phenomena, our choice lies between the inconceivable and the miraculous, there can be no doubt where it must be made. That which is only inconceivable may be made clear by advancement of knowledge; but that which is miraculous supposes agencies above and beyond human knowledge, and therefore makes all labour to investigate it useless and vain.

The feebleness and impatience of the intellect will ever incline us to believe that each advance of knowledge is bringing us near to the point of its consummation. It is so with every discovery; and it is well it should be so, otherwise the ardent inquirer might sit down hopeless at the extent and difficulties of the route to be traversed and of the ascent to be made; still we must beware of accepting any conclusions as final. As I had to remark upon chemistry, that when it reaches the confines of organisation it probably ceases in our living tissues under that form, to appear under some higher correlative—so, no doubt, the same may be said of those molecular conditions with which we are now becoming acquainted. The investigation of the reactions of colloid substances is doing for organic tissues and functions what chemistry has done for elements and elementary composition; but how far the explanations thus afforded extend can be determined only by the further progress of knowledge. Whether we are justified in speaking of muscle and nerve as if they had any relation to mere colloid substances, or whether by a knowledge of these we approach nearer to an explanation of nerve force and its transmission, or to the contraction of muscle, is at least doubtful; for, notwithstanding the admitted instability of homogeneous substances of complex composition, and the tendency to differentiate in various ways, our knowledge of the evolution of the various tissues and organs of the body from the apparently homogeneous ovum is almost as much beyond scientific comprehension as it was when this oration was instituted. It is still, as Harvey remarked, "as if the whole body (chick) was created by a command to this effect of the Divine Architect: 'Let there be a similar colourless mass, and let it be divided into parts and made to increase; and in the meantime, while it is growing, let there be a separation and delineation of parts; and let this be harder and denser and more glistening—that be softer and more coloured: and it was so.'" Yet let it be remembered that Harvey felt the same difficulty when he began the study of the motion of the heart. "I found the task," he says, "so truly arduous, so full of difficulties, that I was almost tempted to think ..... that the motion of the heart was only to be comprehended by God. For I could neither rightly perceive at first when the systole and when the diastole took place, nor when and where dilatation and contraction occurred, by reason of the rapidity of the motion, which in many animals is accomplished in the twinkling of an eye, coming and going like a flash of lightning: so that the systole presented itself to me now from this point, now from that; the diastole the same; and then everything was reversed, the motions occurring, as it seemed, variously and confusedly together. My mind was, therefore, greatly unsettled; nor did I know what I should myself conclude, nor what believe from others." Yet if Harvey's immortal labours overcame the apparently superhuman difficulties of the circulation, who can doubt that some kindred genius shall hereafter lay open before us the springs of development. That this will be done cannot be doubted; for who can draw a limit either in nature or in the understanding, after contemplating the greatness of results, and the simplicity of the factors presented to us in the history of generation? Prior to experience, what could have made such demands upon our belief as that which is daily presented to us in the development of the ovum? From a cell so simple that our minds are baffled by its simplicity in attaching any significance to it whatever, the whole complex organism grows into form and activity. Is it not therefore conceivable, is it not rather by this example suggested, that the higher organic forms which inhabit the world to-day may, by the keen eye of science, be tracked through the dim vista of past time to their equally simple beginnings, varied and modified by the changing circumstances within and around them? Simplicity, as we have proof in these early conditions of the ovum, raises of itself no objections. It is imposed upon the highest as well as the lowest organisms to have the same homogeneous beginnings; and if, as a modern physiologist says, a single cell, under appropriate conditions, becomes a man in the space of a few years, there can surely be no difficulty in understanding how, under appropriate conditions, a cell may, in the course of untold years, from the same simple beginning, give origin to the human race. Biology teaches us that apparently insignificant forces may work large increments of change, when the time of their operation is unlimited. It teaches us that there is a simplicity in nature, greater than the untutored mind could suggest; that the agents are so apparently simple and insignificant that the common sense—or, as remarked, the "common ignorance"—of mankind passes by them without thinking them worthy of attention. But, says Coleridge, to whom I have already referred, "the positions of science must be tried in the jeweller's scales, not like the mixed commodities of the market on the weighbridge of common opinion and vulgar usage."

Every advancement of science exhibits to us new illustrations of great results from causes apparently the most inefficient. Tyndall has lately shown the probability that the green parts of plants may be formed by the decomposition of carbonic acid, through the mere mechanical action of light, under favourable conditions; yet what imagination can picture to itself the force of a single vibration of such light, millions of millions of which strike in a second upon the retina, without causing even a sensation, or only the feeblest. But if Tyndall be right, such force repeated, inconceivably small as it is, is sufficient to clothe our forests from spring to spring, and to fill our fields and vineyards with ample store of food. If we cannot as yet dogmatically assert "ubi vero lumen, ibi quoque vita,' we do thus by every advance of knowledge more clearly perceive that the physical existence, as well as the intellectual development of living things, was involved in the first fiat, "Let there be light."

To turn from these considerations to such as more immediately concern us, let me speak now of the progress which has been made in our knowledge of the nervous system.

Since the discovery of the circulation, no greater work has probably been done in physiology than that by Marshall Hall when he established the conditions of a reflex nervous action. This unit appears to be the key of the most complex nervous phenomena, if it be not, indeed, an expression of the law which determines the form of the whole. From it physiologists have obtained a clue whereby to track the labyrinths of instinct and habit; for, assuming, as we must, that the mechanical arrangements in the nervous system, at periphery and centre, are, in their way, as artificial as the optical arrangements of the eye, or the acoustic arrangements of the ear, we can recognise how the instinctive and volitional acts are performed independently of the conscious determination of the individual.

Physiologists have long pointed out that the basis of our volitional acts is instinctive. That the most instructed anatomist has no advantage over the ignorant in directing his voluntary movements, each being guided by the ob-

jective intention, and both equally intellectually unconcerned in the steps whereby that intention is fulfilled. Together with these innate arrangements, it would appear that habit and education can induce new capacities of a similar kind upon us. From anatomical proof, as well as from actual experience, it would seem that the nervous tissue is highly plastic. Not only is it capable of receiving and registering the impressions made upon it, but of acquiring an instinct for complicated acts.

This, the physical basis of education, and even of morals, though not overlooked, is too little regarded in daily practice. We may therefore congratulate the College that the Gulstonian lecturer of this year has taken up this difficult and important subject, and treated it so ably.

By quitting all abstract considerations, and limiting inquiry to the secondary conditions upon which depend the mental operations, we open a mine rich in practical wealth. Medicine yet owes it to society to demonstrate more fully those secondary conditions whereby a healthy mental activity may be secured and advanced; for of nothing can we be more certain than that the laws of life, in their unimpeded operation, culminate in the advancing perfection of man, corporeally, intellectually, and morally. But the operation of these laws depends upon common things. Whilst the ignorant have recourse to the supernatural, science asserts that everything, if not traced, is yet traceable to its simple antecedents; and, as the handmaid of religion, proves that what a man soweth that shall he also reap. But to return. Whilst lower natures in the organic scale are the immediate subjects of external influences, which act upon and mould them with but little resistance, the reflex nervous actions instituted a new order of phenomena, culminating in the intellect and the use of means. As feeling dawns into sensation, the sentient being directs its movements so as to avoid what is injurious, and to attain what is useful, and in that degree resists those disturbances which would modify the equilibrium of non-sentient natures. As sensation grows into perception, wider relations for good and for evil disclose themselves, and these higher creatures, in the same proportion, avoid what is unfavourable, or seek, on the contrary, by wider movements, the necessary conditions for their existence. As perception leads to knowledge, and mind developes, means of a higher kind are used, and the intellect obviates or regulates the disturbing conditions, until man became cosmopolitan, and greatly independent of the varying forces around him.

He stands, as it has been remarked, at the beginning of a new epoch of existence. His body, moulded by those conditions which have equally acted upon other forms, retains a natural alliance to them, so that the comparative anatomist finds it difficult to place him in a group distinct from quadrumana; but the inner developments of his nature have fixed a gulf between him and the creatures outwardly allied to him which is immeasurable and impassable. By what steps or processes the perception of sense graduated towards the higher forms of intelligence cannot now be discerned; but when mind began to exercise its prerogative of subduing the earth, it obviously brought the subject of it under a new law of existence. The outward agencies which in the beginning had co-operated to produce mechanical results upon our frame, were now opposed and hindered by the operations of mind, and the equilibrium of our physical condition was maintained in spite of circumstances the most variable. Art controlling nature is but a partial expression of the law of man's existence; but even this separates him from creatures next to him by what I have said is an immeasurable and impassable gulf—immeasurable, because there is no known increment which could multiply knowledge according to sense into knowledge according to reason; impassable, because in the onward course of nature those primeval conditions which have culminated in man cannot be supposed ever to recur. Though, therefore, our outward forms remain, like geologic strata in the earth, to indicate the forces by which they were originally moulded, they can be considered no measure of the relation we at present stand in to the lower animals. "Man is," to use the words of the writer* to whom I am indebted for these suggestions, "a being apart, since he is not influenced by the great laws which irresistibly modify all other organic beings." He is a being who is, in some degree, superior to nature, inasmuch as he knows how to control and regulate her actions, and to keep himself in harmony with her, not by a change in body, but by an advance in his mind.

The lower law of nature advances in man to a higher form. It ceases to be mechanical, and becomes intellectual and moral. Force does not now properly balance force, as of individual against individual, and kind against kind, as in the lower natures; but force is properly balanced by right, and right modified by duty. Man is social, as distinct from gregarious; and, in the highest conceptions of that state, would be governed by love rather than by law; for, as we are taught, "Love is the fulfilling of the law," which latter, to use the expression of a friend, "is as it were latent in love, like an inscription in a fountain, becoming visible only when the stream is dry."* And this brings me to speak of a subject now much under discussion, and which touches *our* duty to society.

We cannot, I think, agree to neglect any means which lie within our power of preventing disease. If a rigid scientific method excludes the consideration of final causes where they are so patent, and I may say prominently set forward, as they seem to us, in organic structures—and if it teaches us that this appearance may be more to human eyes than in the sight of Him who ordereth all things by a wisdom transcending our comprehension—if we may not, in fine, without the charge of temerity venture to assign the *why* in physical causes,—how much more open are we to the charge when we set up ourselves as judges of the moral purposes of disease.

I cannot doubt, it is on all sides imperative upon us to limit, and if possible to blot out, all diseases, of whatever kind. Who would assume the responsibility of letting a preventable evil fester in society, on a pretence of a knowledge of the divine purposes, or under the pretext that thereby public morality would be promoted. The duty which lies nearest to us must ever have the first claim; and it cannot but be admitted that the nearest duty each man has to his fellow is to save him as far as possible from all injury, even though that injury may arise as the consequence of his own fault. Nor will it be questioned that the cause of morality is more advanced by beneficent interference than by permitting ourselves to stand passively by whilst intemperance and vice work ruin and infect the very fountains of life.

In what way society should work thus to protect itself may involve considerations of the most delicate and difficult kind; but the object no less remains, and the duty of striving to attain it becomes daily more and more imperative. These remarks apply to all diseases which are common to the social state.

It is now universally acknowledged that the art of medicine is all but powerless in controlling the morbid actions set up in the large class of diseases called zymotic. Specifics will no doubt continue to be sought after, but preventive medicine will more largely obtain the suffrages of the best-informed members of our profession.

There can, perhaps, be no more saddening task allotted to the physician than that of having to prescribe mere drugs against agencies which will, in spite of them, work out destructive effects to their bitter ends. It may be that there do not exist, nor may ever be formed by art, antidotes to these poisons. But should it be otherwise, my duty at this moment still seems to be clear, that I ought not to stir up your minds to search out *such* secrets of nature. Upon this search already too much time has been wasted, and an incalculable amount of life has been lost. On the contrary, I ought to urge upon the profession the most strenuous and united exertions for limiting the spread of these diseases, if it be not possible to altogether stamp them out; and then, if hereafter antidotes should be discovered, we may hope the cases will be rare upon which their operation could be tried.

I cannot pass from this subject without congratulating the College that we number amongst ourselves many distinguished labourers in this department of medicine, or without acknowledging the debt we owe to the late Sir James Simpson. No one more earnestly drew attention to the demands of preventive medicine than he did; and amongst the many claims his memory has upon posterity,

* Alfred R. Wallace on the Origin of Human Races. Anthropological Review, May, 1864.

* Man and his Dwelling-place, chap. vii.

there is perhaps none higher than this—that his mind was intent upon the means which might be best calculated to extinguish contagious diseases. It might seem Utopian were I to attempt to foreshadow the results of a perfect preventive medicine and hygiene; but I may at least say that, followed to their conclusions, they would leave us with a greatly reduced nomenclature of disease.

By drainage of the soil alone, the mortality from pulmonary consumption has been in several places largely reduced. By drainage, as it affects the purity of water-supply, the prevalence of enteric fever has also been greatly limited. And whatever may be the ultimate value of the germ theory of disease, had it done no more than promote the purity of the water-supply to large towns, its good results would have been incalculable. We already owe to it the Metropolitan Drainage Works, the Thames Embankment, the Royal Commission on the Water-supply of large Towns, the purification of the Thames, and such partial filtration of our drinking water as the public waterwork companies cannot avoid.

We have lately been rather blamed for not gratefully accepting the germ theory of disease; but to this College the theory is not new, and, I think I may add, has not been proved to be true. It will be in the remembrance of many present that in the year 1849 a theory was put forth that epidemic cholera was due to fungi and their germs. Peculiar bodies, it was said, had been found in the rice-water evacuations, and also in the air and drinking waters of the infected localities.

It was confidently asserted that we had substantial facts in support of the theory, and that it fulfilled the conditions required of being both true and sufficient. This College thought the subject of such moment that a sub-committee was formed from the Cholera Committee of that day for its investigation. The drinking water of infected places was examined, the air of rooms in which cholera patients were dying was condensed, that it might afford whatever floated in it for examination; dust was collected from cobwebs, window-frames, books, surfaces of exposed food, and every imaginable place, to try it for cholera germs. The rice-water stools and the intestinal evacuations passed in different diseases were scrutinised without stint of labour; but the value of the facts put forth by the promoters of the theory gradually faded under the inquiry. The supposed germs, when really germs (for many shapes had been included in the supposed direful growth), were found to be spores of known harmless fungi and confervæ, of which, if even the startling number of thirty-seven and a half millions should be contained in about two drachms of water, as quoted by Tyndall, from Mr. Dancer's examination,* it is probable that the whole or repeated units of such millions might be harmlessly swallowed.

But for the most part the supposed germs were not germs of any kind, but broken scraps of vegetable and animal tissues, spiral vessels from dried horse-dung, hairs, wings, and legs of insects, detrita of dress, and the like. The results were, in fact, entirely negative of any peculiar bodies to which the epidemic disease could be referred.

One general result arrived at at that time, however, agrees with the observation of Tyndall in his recent investigation of dust by a beam of light—viz., that the floating particles in the air are chiefly of an organic nature. This we might have been prepared for, from the specific weight of dried organic material, enabling such dust to float, when the heavier inorganic substances would be deposited. That the infectious diseases spread by emanations from the sick, must have been long known, and that such emanations are of a solid nature we may infer from the fact that they may be dried and conveyed from place to place; but in what state, whether as amorphous material or as germs, we know no more to-day than was known a thousand years past.

No new fact bearing upon the propagation of contagious disease has been reached by the recent investigations on dust; nor can we infer the nature of summer catarrh because the nasal mucus under such circumstances, and at no other time, was found peopled by vibriones, since decomposing mucus is always populous with this common race of infusoria.

The phenomena of fermentation and putrefaction in dead and decomposing substances afford no explanation of the changes observed in a living body in a fever process. The purulent matter produced in small-pox is not, as we know, in any way comparable to the yeast formed in fermenting fluids. On the contrary, the microscope demonstrates that the forms, as for instance in variolous pus, are not different from those contained in other purulent and innocuous exudations. Nor have we any reason to conclude that any forms which are observed are germs which convey the disease. It is to be regretted that a confusion in terms has been made. Instead of dust and disease, it ought rather to have been dust and putrefaction, or dust and fermentation, since the relation of dust to disease has not been revealed anywhere in the inquiry. That the air conveys the material causes of infectious diseases from the sick to the healthy, is a notorious fact, which had equal force before these inquiries were instituted, though, owing to the exigencies of social intercourse, a fact more neglected than in times of comparative ignorance.

It is difficult to vindicate exactness in progress without seeming to be at the same time a hinderer of it. The onward and the regulating forces of a machine, though not incompatible, but necessary, require the nicest balance. This reflection suggests itself by the way the spread of infectious diseases has been handled. The theories it has given rise to have been so easily put forward as to thereby create distrust. But the spirit of science is no favourer of negations. "Der Geist der stets verneint" finds no greater friend in medicine than in theology. Still it will be admitted that no progress can be made by the ready acceptance of every proposition, however distinguished the source from which it emanates. The parasitic origin and nature of epidemics *may* be true, but it has yet to be proved. As an hypothesis, it admits of proof or disproof, and so has further claim upon the industry of those who have put it forward as a suggestion. Without going to the length which this hypothesis demands, we must admit, however, that we know enough to guide us much further than we have yet gone in the practice of prevention.

To leave these discursions, and in a few words to conclude my task, I would repeat that the distinction of Medicine lies in its comprehensiveness. The student of physical science admits that he has to deal with but one-half of that truth which is expressed in man; but the student of medicine cannot so limit himself. The facts of sensation, whether pleasurable or painful; the influence of the mental emotions, whether exciting or depressing; the dominion of the conscience, approving or disapproving,—are equally for him facts due to the operation of laws into which he must inquire. Looked at from the point of view which he occupies, these higher facts of man's nature are as essentially part of the law within him, and control and modify his existence equally with those lower conditions with which physics alone is concerned. And this makes the unspeakable difficulty which every student of medicine must feel in the present imperfect state of knowledge.

To hold the mind in an equal balance as it passes from the contemplation of the lower facts of our existence to those which characterise the highest claims of our humanity, so as neither to degrade the one nor neglect the other, is one of the highest attainments possible for man. What eye is single enough to survey the range of life from the material atoms which build our structures, to those "mighty hopes which make us men," without faltering in the vision, or without confusion of the objects.

Every student exalts and distorts the work upon which he is chiefly occupied. The anatomist with his microscope hopes thereby to fathom the depths of nature, and the student of the pure intellect despises his labours, each arriving at impotent conclusions by not mutually aiding and supporting his fellow-labourer. Yet perhaps the chasm between the two orders of human facts is other than it seems. It may be due to our not seeing that we are not dealing with *contraries*, but with *opposites*: opposites in the highest sense; not as if the terms of the one contradicted the terms of the other, but with the assurance that each will be understood by admitting its antithesis. Here, says Herbert Spencer, "we arrive at the barrier which needs to be perpetually pointed out, alike to those who seek materialistic explanations of mental phenomena, and to those who are alarmed lest such explanations may be found. The last class prove by their fear, almost as much as the first prove by their hope, that they believe Mind may possibly be in-

* "Proceedings of the Royal Institution of Great Britain," January 21st, 1870.

terpreted in terms of Matter, whereas there is not the remotest possibility of so interpreting them." What the student of nature's mysteries always needs to remember is his position as viewing things from his own centre. What he has chiefly to avoid is that discouragement should not pass into denial. If our difficulties are great, our hope and assurance are firm that the laws of health, in their highest acceptance, are laws of truth, and, I do not hesitate to say, laws of holiness. Thus, only to those unconversant with the practice of medicine can it seem strange that, ever occupied as we are with the failures of humanity, the mists of physical and moral disease should fail to obscure the brightness of that ideal perfection which the "law of life" casts upon our path.

FURTHER OBSERVATIONS ON THE USE OF CARBOLIC ACID IN SURGERY.

BY EDWARD R. BICKERSTETH, F.R.C.S.,
SURGEON TO THE LIVERPOOL ROYAL INFIRMARY, AND LECTURER ON CLINICAL SURGERY.

AT the present time, when surgeons are divided in opinion regarding the results obtainable by the antiseptic treatment of wounds and abscesses, and when the medical periodicals are teeming with reports, either ridiculing the theory and practice or extolling it as a universal panacea, it becomes the duty of those who have had the opportunity of investigating the subject, and who have strictly attended to the principles and minutiæ of management required, to record their opinions and the facts on which they are founded. Having already expressed my views with considerable confidence, and published* some remarkable cases of ligature of the great arteries (one of the carotid in particular, where the vessel was tied with carbolised catgut and both ends of the ligature cut off, and the entire wound healed within five days without a single drop of pus), I propose now to record other cases, which appear to me equally demonstrative of the advantages to be derived by the adoption of the antiseptic treatment, and of the power we possess of preventing or checking suppuration, and of lessening the risks arising from inflammation of deep tissues, exposed, by wound or otherwise, to the influence of external agencies.

CASE 1. *Suppurative synovitis of the knee-joint in an old man; the joint opened and washed out with carbolic lotion; recovery without subsequent suppuration, and with a movable joint.*—James K——, a feeble old man, who said he was only sixty years of age, but looked much older, was admitted into No. 6 ward on March 24th, 1869. He stated that pain and swelling had existed in the left knee for upwards of a month, but that he had continued to work as a labourer till a week before admission. The joint was much swollen, and the patella floating from synovial effusion; and there was so much general febrile disturbance of the system that I suspected suppuration was commencing.

The limb was placed in a M'Intyre splint. Linimentum iodi was freely applied over the lower half of the thigh and the upper half of the leg, but not over the joint, which was ordered to be constantly fomented. Under this local treatment and appropriate general management there was decided alteration of the general symptoms, and the swelling of the leg decreased for a few days; but afterwards the swelling of the thigh was observed to have increased, and, from the extent and position of the fluctuation, it was obvious that the effusion within the joint had escaped beyond the synovial capsule and had penetrated among the deep muscles. On April 5th I introduced an ordinary hydrocele trocar on the outer side of the joint, and drew off about three ounces of thick synovial fluid, which was followed by upwards of an ounce of pure pus. Fomentations were persevered with, but the iodine liniment was discontinued. For a few days after this procedure there was some improvement in the general condition of the patient, and apparently of the limb; but very soon the swelling increased, and became larger than before, extending upwards as high as the upper third of the thigh. Fluctuation was very perceptible, and the skin became red and œdematous over the lower and lateral surfaces. No doubt could now exist that the joint was full of pus, which was making its way upwards among the deep muscles around the femur.

The prospect of affording relief by laying open the joint, in an old man of feeble constitution, exhausted by long confinement and suffering, was almost hopeless, and I should have despaired under the ordinary plan of operating. By strictly adhering to the rules and principles of the antiseptic treatment I believed that the contents of the cavity might be safely evacuated, and that then, the principal source of irritation being removed, resolution and repair would take place. On April 14th, under the protection of carbolic oil, which was constantly smeared over the part during the whole of the operation, I made an incision, four inches in length, on the outer side of the joint, and opened the articulation, giving vent to a large quantity of thick purulent matter. By making pressure around the thigh and the joint I then endeavoured to empty the cavity entirely, and while this was done the entrance of air was prevented by keeping folds of lint soaked in the oil over the incision. But I found it impossible to press out all the pus, and as I considered this a matter of great importance, and had moreover frequently observed the good effects of washing out the cavities of deep-seated abscesses with carbolic lotion, I determined to do this in the present case. Passing my finger into the joint along with the nozzle of the injecting syringe, I threw in upwards of a pint of the watery solution (1 in 40), thoroughly washing out the whole cavity of the joint and of the abscess. The fluid was then pressed out, the same care being taken as before to prevent the entrance of air. I felt the cartilaginous surface of the joint softened and flocculent. The thigh was supported by a many-tailed bandage, so as to keep the walls of the abscess in contact, and the wound was protected by oiled lint. So much oozing, however, continued to come from the incision that I was reluctantly compelled to remove the covering, and plug the wound with lint soaked in carbolic oil, which I covered with a pad of oiled lint having oil-silk over it, and cotton wool and a bandage over that again. I directed the plugs to be removed after twelve hours, but, unfortunately, at the time of removal the bleeding recurred, and it was necessary to replace similar ones and dress the incision as before.

On the third day after the operation the plugs of lint were carefully removed under the protection of carbolic oil, and three thicknesses of lint soaked in the oil were then placed over the incision, overlapping it at least two inches every way, and secured in position by tapes. Over these were laid three other layers, with oil-silk over all; and each day these latter were renewed and the deeper ones resaturated with oil. Not a trace of suppuration was observed till the 23rd (nine days after the operation), when, on pressing the deep folds of lint, a drop or two of pus exuded. They were therefore renewed, but the wound was not looked at, because as the old protection was drawn off another was slipped on.

For the succeeding five weeks nothing was done beyond the daily removal of the upper layers of the lint. Once or twice it was thought that a drop or two of semi-purulent matter exuded when the under pieces of lint were pressed, but the quantity was so small as to be doubtful. The swelling of the thigh disappeared, and the knee resumed its natural size and shape, so that the bandages encircling these parts required to be frequently tightened. The general state of the man improved greatly.

On May 28th I ventured to remove all the dressings and inspect the wound. It had healed soundly except at the upper part, where a small fistulous opening existed, from which I pressed four or five drops of pus. The carbolic dressings were replaced immediately. Three days afterwards (May 31st) a few drops of pus were observed, and the wound was again exposed, when the small aperture before noticed was found to have enlarged considerably, and a substance looking like a piece of fat, of the size of a small walnut, fell out. This proved to be one of the plugs of lint, which had thus remained embedded for upwards of six weeks. The cavity from which it escaped was lined with healthy granulations, and had no connexion with the joint. It healed in a few days with simple dressings. On June 5th the limb was removed from the M'Intyre splint, and placed over an ordinary bed-pillow supported on either side with sand-bags. Passive movements of the joint were then com-

* See THE LANCET, May 29th and July 24th, 1869.

menced, and after a few days the patient was able to raise the limb without assistance, and to bend the joint slightly. On July 10th he walked with the assistance of a stick, and soon afterwards was well enough to leave the hospital at his own request.

CASE 2. *Chronic disease of knee-joint in a boy aged eleven; suppuration in joint; rupture of matter into tissues of thigh, and formation of chronic abscess; evacuation of abscess, and recovery without any subsequent suppuration.*—The patient, a boy aged eleven, had suffered for some time before coming under my care from strumous enlargement of the left knee-joint. The joint had at one time almost got well, but not very long before I saw him the boy had slightly injured it, the swelling had reappeared, and matter had formed in the joint and eventually burst into the tissues of the thigh. When brought to Liverpool the patient was attenuated and worn out to the last degree. The sound thigh was a mere spindle, not much thicker than a man's wrist, while the diseased one presented the appearance of a great shaking bag of matter, extending from the upper third of the thigh down to the knee, and equal to about two-thirds the circumference of the lad's chest. It was plain that the pus was to be evacuated, but it was equally plain that if the abscess was opened in the usual manner, and poultices applied, the risk of exhaustive suppuration would be so great as to give the patient, in his enfeebled condition, very slight chance of recovery. It was determined to use the antiseptic method, which at that time consisted in the use of the carbolic putty (made of carbolic oil and whitening) and a covering of tinfoil. On Nov. 30th, 1868, therefore, chloroform was administered, and a free incision was made on each side of the joint, an antiseptic curtain of lint dipped in carbolic oil being instantly let fall over each wound. An immense quantity of pus flowed out beneath the curtains, and the abscess was then completely emptied by pressure. A layer of carbolic putty, spread on linen, and larger than the curtains, was then applied over each, and above these again pieces of soft tinfoil, and finally strips of interrupted bandage to keep all in place. The curtains were retained in position by tapes passing round the thigh. The leg was then placed upon a light iron splint reaching up to the buttock, and provided with a foot-piece, which was slung in a cradle.

The patient recovered well from the chloroform, and his progress from that day was uninterruptedly favourable. Each morning, and for the first few days each evening also, the carbolic putty was renewed, and the tinfoil and strips of bandage replaced; but the curtains were carefully left untouched, being merely resaturated with oil. The thigh was gently pressed from above downwards, in order to make sure that no matter was accumulating in the upper part of the old abscess; and, after a few days, a bandage was put on at that part, so as to consolidate and keep the tissues supported. The boy's appetite returned at once after the operation; and the improvement in his general condition was most marked and rapid. He had anything to eat that was nourishing and digestible, drank some porter and a glass or two of sherry each day, and had a tonic mixture and cod-liver oil.

The daily history of the case need not be detailed. The curtains were not removed for a week; at the end of which time new ones were supplied, being slipped down over the old ones as the latter were drawn away, so that the wounds were never exposed. This treatment was diligently pursued (new curtains being supplied every week or ten days) for a period of five or six weeks; and not till then were the wounds looked at, a liberal dose of oil being allowed to flow over them during their momentary inspection. It was found that the edges of the incisions had gaped considerably; but they were filled up by smooth, pale, inactive granulations at each end for about two-thirds of their whole extent. In the centre of each was a yellow-looking portion, over which the granulations did not extend; and some old cheesy flakes of pus, the remains of what escaped at the time of operation, were lying about these parts. *During all these weeks, from the hour of the operation, there never exuded more than one or two drops of pus daily from the incisions.* The former dressings were again renewed, as the child's parents were anxious that perfect success should be obtained at any cost of time and patience. At first, after the matter was evacuated, the joint was a round shapeless mass; but gradually, so to speak, it softened down, the patella became recognisable, and the hollows about the articulation reappeared. From time to time the wounds were glanced at; but they seemed to remain very inactive. At length, however, the yellow-looking portions diminished to mere lines in the centre of the deepest portion of each wound; and then lint, dipped in carbolic oil and covered with oil-silk, was applied daily, and, after a further interval, red lotion was employed to hasten cicatrisation. The original splint and swing had been dispensed with for nearly a couple of months in favour of a light steel back splint, carefully adapted to the thigh, in order to secure immobility of the joint. The patient called upon me a short time ago, nearly eighteen months after the operation. He was in excellent health, and able to walk well, with no more lameness than resulted from the joint being almost anchylosed in a nearly straight position. He wears a light steel support, to prevent a slight tendency to backward displacement of the tibia which still exists.

With regard to the first case, I have recorded it fully because I consider it well exemplifies the marvellous influence of the antiseptic treatment when minutely, thoroughly, and persistently carried out. I have constantly practised making free incisions into acutely inflamed and suppurating joints, and am well aware of the advantages to be derived from so doing; but that this can be accomplished without subsequent considerable and exhausting discharge, and with success in an old and enfeebled subject, is entirely beyond my experience under any other plan of treatment than that which was adopted.

The first case, then, was an acute suppuration in the knee-joint of an old patient. The second was of a perfectly different nature, being a chronic suppuration in a young subject, and consequently of a more hopeful nature as regarded the patient's ultimate recovery. But here, too, I assert that under no other mode of treatment could a great abscess connected with the largest articulation in the body have been safely opened, and have finally closed up, without more than a daily escape of, at the most, a drop or two of matter. Of course, after the abscess had consolidated, and nothing remained but two red granulating lines, the carbolic treatment having been discontinued and red lotion applied, then at once matter formed, as from a mere superficial sore. Indeed, I should say that more true pus came from these superficial sores in a day, during the short period they took to cicatrise, than escaped from the wounds during the many weeks of carbolic treatment which succeeded the operation. At the time this case was treated, Professor Lister had not brought out the carbolic plaster, and the putty and oil were then in use; but it serves to show that, whatever the materials, and however employed, if the particular principles of the antiseptic method be rigidly adhered to, success may almost always be obtained.

(To be continued.)

A CASE OF

ACUTE RHEUMATISM, WITH EXCESSIVELY HIGH TEMPERATURE, TREATED BY REPEATED IMMERSIONS IN THE COLD AND TEPID BATH.

BY WILSON FOX, M.D., F.R.C.P.,
PROFESSOR OF CLINICAL MEDICINE AT UNIVERSITY COLLEGE, LONDON.

SEVERAL instances of excessive temperature, occurring in the course of rheumatic fever, associated with cerebral symptoms, have recently been published in this country by Drs. Ringer,* Weber,† Sanderson,† and Murchison.‡ The following case, though the result of the treatment adopted was finally unsuccessful, is nevertheless, in my opinion, worthy of notice, as a further contribution to the effects of the external application of cold in the diminution of pyrexia. This method has been fully exemplified of late in the treatment of typhoid by the writings of Brand, Jurgensen,

* Med. Times and Gaz., 1867.
† Trans. Med.-Chir. Soc., vol. l.
‡ Ib., and THE LANCET of May 21st, 1870. In Dr. Weber's and Dr. Murchison's papers full references are given to the recent authorities on this subject.

and Liebermeister, who have recently revived the mode of procedure advocated in this country by Dr. Currie nearly a century previously. As far, however, as I am aware, the application of this treatment to cases of excessive temperature in rheumatism has not been previously practised, though suggested in Dr. Weber's paper. The case was not altogether a simple one, inasmuch as before the treatment by the cold bath was commenced a large bleeding had been practised; but the effect of the cold bath was certainly, in my opinion, to prolong life considerably beyond the period at which a fatal termination is usually observed when the temperature has already reached the excessive height—109° F.—which it attained in this case previously to the adoption of this measure.

E. H——, aged thirty, a well-built, strong, healthy, active, well-nourished female, a housemaid in a gentleman's family, with no hereditary predisposition to disease, and whose health had previously been perfectly good, suffered, about three weeks before the attack of rheumatic fever, from some pain in the wrist, which was attributed to a strain, and which passed off in about a week under the application of wet bandages. On Sunday, May 23rd, 1869, she complained of pain and swelling in the left ankle; there was very slight pyrexia; temperature 99½°. She was kept in bed; took a dose of calomel and Dover's powder, followed throughout the week by a mixture composed of a scruple of bicarbonate of potash and a drachm of acetate of ammonia solution, taken every fourth hour; and the joint was wrapped in cotton-wool. The joint affection and pyrexia during the following days were very slight, the temperature never being found to exceed 99½°. On the 30th the opposite ankle and the right hip were, however, attacked, and the temperature was found to be 100°. She was then removed to University College Hospital. The temperature on May 30th and 31st and June 1st did not exceed 101·4°, but on the evening of June 2nd it rose to 102·2°. On the 2nd the wrists were attacked, the affection of the ankles having partially subsided. Some indications of pericardial effusion were then also discovered, in indistinctness of the apex beat and slight elevation of the cardiac dulness. These were found on the 3rd to be more evident. The apex beat was in the fourth interspace; the dulness had extended to the second costal cartilage, and friction-sound of grazing character was heard at the base. It was subsequently ascertained that menstruation had appeared on the night of June 1st, and ceased abruptly on the night of the 2nd, without any discoverable cause. During June 3rd the temperature continued to rise throughout the whole day, without any fresh joint affection, but with a gradually increasing degree of restlessness. Sweating, which had been slight through the whole disease, continued throughout the early part of this day. The subsequent condition of the patient in this respect was not noted.

The rise of the temperature was, however, sudden and abrupt in the later hours of the evening of this day.

At 10 A.M.	it was	102°	in the axilla; pulse 112; resp. 28.
At 8.30 P.M.	„	104·8°	„
At 11.30 P.M.	„	106°	„
At 12	„	107·8°	„

During the evening delirium had commenced, and at 11.30 I was summoned, and found the patient with a hot skin, and violently delirious, requiring at times two people to restrain her in bed, uttering loud cries and talking incessantly. The state of the heart was unchanged. The exact frequency of the pulse was not recorded. I determined to try the effect of a full bleeding. This was practised at 12.25 A.M. on the morning of June 4th, to the extent of between twenty and thirty ounces. The blood was unfortunately thrown away without examination. The immediate effect of the bleeding on the delirium was remarkable. It ceased abruptly, and the patient was quiet for a short time, but passed into a state of perfect unconsciousness. Then succeeded a peculiar series of irregular muscular movements of the hands and arms, with chattering and grinding of the teeth, and convulsive movements of the jaws, which continued for some time, during which, however, a further elevation of the temperature ensued.

At 1 A.M. on the 4th, or within half an hour after the bleeding, it had reached 109°; at 1.10 A.M. it was 108·9°. She was then wrapped in a wet sheet, and retained there fifteen minutes, and subsequently was lifted with the sheet and dipped in a cold bath (temperature 60°) for five minutes. After this the temperature was 108·4°, which was maintained for fifteen minutes. She was then immersed for fifteen minutes in the cold bath, temperature 60°. The temperature in the axilla, after removal from the bath, at 2.25 A.M., was 104°; in the rectum, 107·1°. But at 2.34 A.M., or nine minutes later, the latter was found to be 106·4°; and at 2.45 A.M., or twenty minutes later, it was 105·4°, reaching, at 3.15 A.M., 104°. At 3 A.M. there was an attack of clonic spasms of the muscles of the arms, lasting some minutes; but the temperature continued to fall until 4.20 A.M., when it reached 102·8° in the axilla, having been noted at 3.50 A.M. as 103·7° in the rectum. At 5 it had again risen to 104·8° in the rectum, and continued to rise steadily until 7 A.M., when it had attained to 106·3°. At this time she was placed in a bath of the temperature of 80°, and retained there five minutes. At 7.20 the temperature in the rectum was 105·1°, and by 8·45 it had fallen to 104·2°. It then again began to rise, and at 10.35 had reached 105·6°, when the patient was again placed during six minutes in a bath at 80°. Nine minutes after her removal from the bath the temperature had fallen in the rectum to 105·1°, but rose again within twenty minutes to 105·6°, and maintained this height for an hour, when it had again risen to 105·8°; and in two hours (12.45) after removal from the bath had reached 106·4°. She was again kept for eighteen minutes in a bath at 80°, during her stay in which signs of syncope appeared. Seven minutes after removal from the bath, the rectal temperature was 105·8°, and it fell during the succeeding hour to 104·8°. It then again began to rise, and within another hour and a half (3.45 P.M.) the thermometer stood at 106·4°. She was then kept for twenty minutes in a bath at 78°. Five minutes after her removal from this the temperature of the rectum was 104·8°, and continued to fall for another hour and twenty minutes (5.30 P.M.) to 103·6°. It then again rose, and in three hours (at 8.30 P.M.) it had again reached 106·5°. She was placed in a bath at 78° full, and kept there for 45 minutes. During the time that she was in the bath the temperature fell gradually to 103·2°, and continued to fall for 70 minutes after her removal, until it had reached 101·8°. The succeeding rise occupied a much longer period than those preceding, the temperature of 106·1° being only attained after four hours, or at 2.45 A.M., and the subsequent effect of this bath was thus to keep the temperature for four hours below 104°, including the time occupied by the fall below this temperature and the subsequent rise until it was again attained. At 2.45 she was again placed in a bath of 80° for ten minutes, the continuous sinking during so long a period which had *followed* the more prolonged action of the bath having impressed me with the necessity of caution in the then exhausted state of the patient. The effect of the shorter stay in the bath was less marked. The temperature fell during one hour to 104·4°, and then rose gradually during two hours and twenty-five minutes, when at 5.10 A.M. it had again reached 106·2°. A subsequent immersion during forty minutes again lowered the temperature to 102° in the axilla and 103·4 in the rectum, and it never again rose above 105°. The exhaustion of the patient was now extreme; but as the thermometer still showed, after two hours, a tendency to rise, the patient was placed in a bath at 92°, to be raised to a temperature a little below the normal standard of a healthy person, in which she was kept for an hour and a quarter. The effect of this on the temperature was that it fell to 104·4°, and maintained this uniform standard during an hour without either subsequent elevation or depression. The patient continued to sink, however, and as death was evidently approaching, she was removed from the bath at 12.15, and died at 12.20, or nearly thirty-six hours after the treatment was commenced.

It requires to be mentioned that colliquative diarrhœa of intensely fetid character, and attended by meteorism of the abdomen, commenced soon after the bleeding, and continued uninterrupted throughout the whole of the rest of her life. Both the stools and the urine were passed unconsciously, but the patient was able to swallow, and brandy, beef-tea, and quinine mixture were given at frequent intervals. A few doses of tincture of opium, three minims, and compound spirit of lavender, two drachms, were also given.

It was evident, however, that the lowering of the temperature was due to the bath alone, and not to the remedies

employed. An hour and ten minutes after death the temperature of the body (whether in the axilla or the rectum is not stated) was 99·4°, in a room of 67°.

A post-mortem examination was, unfortunately, not attainable; but, during the last day of life, Dr. Squarey called my attention to the fact that percussion over the region of the heart had become normal, and this I confirmed.

It is not my intention to enter here into the theory of pyrexia, which will be found ably discussed in Liebermeister's work, and also in Dr. Weber's paper read before the Clinical Society. A single case like this is only of value in pointing attention to the controlling power over the temperature which can be exerted by the artificial abstraction of heat.

It is now generally believed that the rapid tissue changes which are the immediate cause of fever are probably due to perverted influence of the nervous system; but whether this effect is produced solely through a disturbed condition of the cerebro-spinal axis, or whether direct effects may not be in part due also to derangement in the action of the local nerve centres and ganglia, which may probably be concluded, from Mr. Lister's researches, to pervade the elementary tissues throughout the body and to influence their nutrition, is a question to be settled by further observation. It has, however, at least some hypothetical interest in the explanation of the beneficial effects of the external application of cold water in fever. That this treatment is in many cases advantageous may, I think, be considered as proved by the unanimous testimony of the numerous German observers who have given it a large trial. I think it also proved that this result is not due solely to the *immediate* effect of the abstraction of heat from the body when this is excessive. It is evident that some influence is further exerted in the processes by which the abnormal heat is produced, since the most marked fall of temperature may continue to take place in *internal* parts, as in the rectum, for a considerable period after the direct process of heat abstraction by water has ceased—i. e., for some hours after a patient has been removed from the bath. I have witnessed the same effect during this method of treatment in typhoid; and, in fact, it requires to be very carefully watched, lest collapse ensue during periods which are, comparatively speaking, long, and subsequent to the primary cooling.

I have thought it best to lay this case before the profession in order to invite attention to this method of procedure in a class of cases which have hitherto invariably proved fatal. They are so rare that a single individual may have to wait long before the possibility occurs of collecting any large amount of evidence on this subject. I think, however, it is specially worthy of notice that, whereas in all the published cases of excessive temperature in rheumatic fever, death has occurred within five or six hours after a temperature of 109° Fahr. has been attained, in this instance life was protracted for thirty-six hours; and this fact may excite a hope that in some cases at least recovery might possibly take place if this treatment be adopted. I regret that venesection was practised in this case, as it probably only diminished the vital power, and certainly had no effect in averting the rise of temperature, and further complicates the evidence as to the effect of the cold, though the latter stands in so clear a relation to that observed during its application in other cases of pyrexia that I am not disposed to believe that it was materially influenced by the previous venesection. The mode of employing the bath might probably be modified by further experience. It might possibly be better to employ it on each occasion directly the minimum point of depression has been attained, and before any material rise had been allowed to occur, as by this means the destruction of tissue and loss of strength by the patient might be maintained at their minimum. Another plan which suggests itself was that partly adopted of keeping the patient continuously in a bath very little below the normal temperature of the body. Liebermeister's observations show that the water is comparatively rapidly warmed by this process, and therefore its temperature must be noted, and cold water added from time to time. The following table exhibits the continuous series of temperatures observed and the effects of the treatment. I desire to express my obligations to Dr. Squarey, the then resident medical officer of the hospital, who, with my assistant, Mr. Dessé, most ably assisted my observations, and to whom many of the records of the temperature, particularly those made on the second night of the treatment, are due.

Date.	Temperature.*	Pulse.	Resp.	Remarks.
May 30th:				
9·45 P.M.	100·4	100	22	
May 31st:				
11·45 A.M.	100	96	28	
9·45 P.M.	101·4	—	—	
June 1st:				
10 A.M.	101·4	104	32	
9 P.M.	101·4	—	—	Menses appeared June 1, and ceased during night of June 2.
June 2nd:				
10 A.M.	101·4	104	32	
9 P.M.	102·2	—	—	
June 3rd:				
10 A.M.	102	112	28	
8·30 P.M.	104·8	—	—	
11·30	106	—	—	
12	107·8	—	—	Violent delirium.
June 4th:				
12·25 A.M.	—	—	—	Bled to more than 20 oz.
1	100*a*	—	—	Trismus and spasm.
1·10	108·9*a*	—	—	At 1·25 A.M. was
1·40	108·4*a*	—	—	wrapped in wet
2·20	104*a*	—	—	sheets for 15 min.
2·25	107·1*r*	—	—	Cold bath 15 min.;
2·34	106·4*r*	—	—	temp. 60°.
2·45	105·4*r*	—	—	
3·15	104*r*	—	—	3 A.M., clonic spasm
3·50	103·7*r*	—	—	of arms.
4·20	102·8*a*	—	—	
5	104·8*r*	—	—	
	104·6*a*	—	—	
5·35	105*a*	132	—	
6	105*a*	128	—	
6·30	105·5	—	—	
7	106·3	—	—	
7·7	—	—	—	Bath 80°; 5 min.
7·20	105·1*r*	128	—	
7·55	104·2	132	—	
8·45	104·2*a*	132	—	
9·15	104·4	132	—	
10·10	105·6	120	—	
10·35	106·6	—	—	
10·40	—	—	—	Bath 6 min.; tem-
10·46				perature 80°.
10·55	105·1*r*	—	—	Pulse very weak; pe-
11·15	105·6*r*	—	—	culiar puffing respi-
11·45	105·6*r*	—	—	ration; diarrhœa.
12·10 P.M.	—	144	—	Draught, 10 minims
12·15	105·8*r*	—	—	of tincture of opium with comp. sp. of lavender. Meteorism.
12·45	106·4	—	—	Bath 11 min.; temp.
1·5	105·8*r*	—	—	80°. Signs of syn-
1·40	104·9*r*	—	—	cope; diarrhœa pre-
2·15	104·8*r*	—	—	sent.
2·45	105·2*r*	—	—	
3·15	105·9	—	—	
3·45	106·4	—	—	
3·55	—	—	—	Bath 20 min.; tem-
4·20	104·8*r*	—	—	perature 78°.
4·50	103·5*r*	136	—	
5·30	103·6*r*	—	—	
6·20	104·1	132	—	
6·50	104·8	—	—	
7·20	105·2	—	—	
7·50	106·2	—	—	
8·20	106·5	—	—	Bath 45 min.; tem-
8·37	106·8†	—	—	perature 80°.
8·45	105·4†	—	—	
9	103·8†	—	—	
9·5	103·2†	—	—	
9·20	102·6*r*	—	—	
10	101·6*r*	—	—	

* The temperature was taken in rectum where indicated by *r*. The site of some of the rest of the observations is not noted; some, indicated by *a*, were taken in the axilla.

† Rectum and while in bath.

Date.	Temperature.	Pulse.	Resp.	Remarks.
10·30	... 101·8*r* ...	—	... —	
11·15	... 102·1*r* ...	124	... —	
11·45	... 102·6*r* ...	—	... —	
June 5th:				
12·15 A.M.	... 103·2*r* ...	—	... —	
1	... 104*r* ...	—	... —	
1·30	... 104·6*r* ...	—	... —	
2·15	... 105·9*r* ...	—	... —	
2·45	... 106·1*r* ...	—	... —	Bath 10 min.; temperature 86°.
3·6	... 105·8*r* ...	144	... —	
3·45	... 104·4*r* ...	144	... —	
4·15	... 105*r* ...	144	... —	
4·45	... 105·6*r* ...	144	... —	
5·10	... 106·2*r* ...	—	... —	
5·13	... — ...	—	... —	Bath 12 minutes.
5·35	... 105·6*r* ...	140	... —	
6·15	... 104·2*r* ...	138	... —	
6·45	... 104·8*r* ...	144	... 46	
7·15	... 105·3*r* ...	—	... —	
8·10	... 106·8*r* ...	—	... —	Bath 30 minutes.
8·30	... 106·4‡ ...	—	... —	
8·40	... 105·4‡ ...	—	... —	
8·50	... 104·8*r* ...	—	... —	
9·20	... 102*a* ...	—	... —	
9·30	... 103·4 *a*? ...	—	... —	
9·55	... 103·6 *a*? ...	—	... —	
10·5	... 104 *a*? ...	—	... —	
10·40	... 104·8 *a*? ...	—	... —	
10·55, put into bath, and retained there until 12·15. Temperature of bath 92°.				
11	... 105‡ ...	—	... —	Bath 95°.
11·10	... 104·2‡ ...	132	... —	Bath 98°.
11·20	... 104·4‡ ...	132	... —	Bath 97°.
11·30	... 104·4‡ ...	132	... —	Bath 96°.
11·40	... 104·2‡ ...	136	... —	Bath 94°.
11·50	... 104·6‡ ...	132	... —	Bath 93°.
12	... 104·4‡ ...	130	... —	Bath 92°.
12·20 P.M.	Death 5 min. after removal from bath, room 67°.			
1·25	... 99·4‡ ...	—	... —	

‡ In bath.

ON THE

OPERATION FOR ARTIFICIAL PUPIL.

BY PROFESSOR LIEBREICH.

To the Editor of THE LANCET.

SIR,—I beg to forward you for insertion a translation of a note on the Operation for Artificial Pupil, which was lately read by Professor Liebreich before the Academy of Sciences at Paris, and by him communicated to me.

Trusting that the great interest of the subject, and the just celebrity of the author, are sufficient reasons for troubling you,—I am, dear Sir, yours truly,

Birmingham, May, 1870. LLOYD OWEN.

THE advances made by modern ophthalmology have so greatly increased the number of indications for the performance of iridectomy, that this operation has become one of the most important in surgery. In fact, it is well known that it sometimes produces a therapeutical effect, at others an effect purely optical, whilst occasionally the two effects are combined.

Other operative methods for artificial pupil, such as iridodialysis and incarceration of the iris in the wound, have been completely abandoned for several years. At the present day the operation consists invariably in the excision of a piece of the iris.

It is hardly necessary to say that the form and extent of the excised portion must vary greatly in each particular case, according to the effect sought by the operation. Thus, for example, when iridectomy is employed as the sole and powerful remedy against the various forms of glaucoma, and certain forms of irido-choroiditis, the excision of a large portion of the iris must be practised, including both the ciliary insertion and the pupillary margin; in these cases, the aperture resulting from the union of the natural and artificial pupils assumes the form of a keyhole.

Should it be desirable, on the other hand, to obtain an effect solely optical—that is, to give passage to rays of light when the natural aperture of the pupil is obstructed, by a partial and stationary cataract for instance—it would be generally preferable to make a narrow artificial pupil, for the same reasons that, in optical instruments, have governed the adoption of diaphragms with narrow apertures.

In some other cases—for instance, in central opacities of the cornea, with adhesion of the iris,—it is frequently desirable to excise a large portion of the pupillary margin of the membrane, and only a narrow extent of its periphery. If on penetrating more deeply into this question, the individual cases in these categories be analysed, it is impossible not to recognise the fact, that it is very necessary to be able to vary the iridectomy at will in order to render it as useful as possible in each individual case. But hitherto we have not been in possession of the very desirable means necessary to accomplish this end. We are ordinarily incommoded by certain difficulties in the mechanism of the operation. We have not the freedom of action necessary in order to vary the shape and size of the iridectomy according to the urgency of the case.

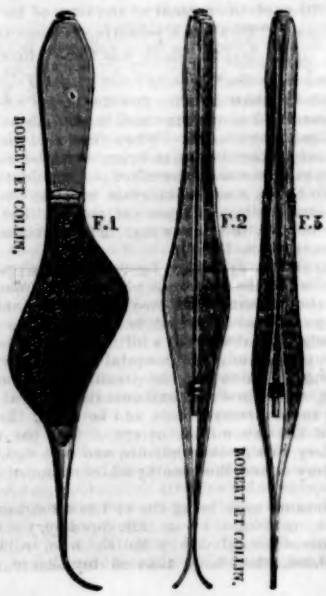
In the usual operation, after having made an incision in the cornea, a small pair of forceps is introduced into the anterior chamber, with which the iris is seized and drawn out of the wound, and a portion of it excised. But it is the size and position of the incision in the cornea which almost solely determine the shape and size of the excision.

For the forceps, which should always be introduced in a direction corresponding to the radius of the cornea—that is, towards the pupillary centre,—are limited in their expansion by the extent of the aperture in the cornea. If the grasp of the forceps has not been sufficiently extensive, and the portion of iris excised consequently is too limited, this fault can rarely be corrected after the first attempt, because a repeated introduction of the forceps is fraught with danger to the crystalline lens, which is no longer protected at this point by the iris.

In order to avoid these difficulties, and render the shape of the artificial pupil more independent of the dimensions of the corneal incision, which it is not always possible to make of the size deemed necessary, it has seemed to me desirable to substitute for the ordinary iridectomy forceps an instrument which it shall be possible to introduce through a narrow opening in the cornea, and which nevertheless shall expand widely in the anterior chamber.

It was necessary that this instrument should be capable of being introduced in any desirable direction other than radial.

Starting from these practical considerations, I have invented a new form of forceps, answering completely all



conditions requisite for iridectomy. The following is a description of the instrument:—

The limbs of these forceps do not open in the ordinary manner, but turn round a longitudinal axis in such a way that their rotation alone suffices to open and close their curved extremities. The movement of opening and shutting takes place without the part of the instrument which is engaged in the wound participating in the least degree: this part of the instrument, on the contrary, remains closed when the extremities are expanded. The size of the wound plays no part in the mode of action of the instrument on the iris. As a result of this circumstance, the introduction of the instrument is not limited to a radial direction; it may take place in a series of other directions, all comprised in the extent of a segment of a circle of which the circumference is described by the curved extremities of the forceps taken as a radius, whilst the centre of the circle is the part of the wound in which the instrument is situated.

The application of these new forceps does not present the slightest difficulty. Holding them like a pen between the three fingers, they are opened by placing the index finger on the instrument, and closed by applying the middle finger.

The manufacture of the instrument is also sufficiently simple.

The principle on which the construction of these forceps depends has never been applied to any surgical instrument. I believe that this principle may easily be utilised for many other instruments; but I hope, above all, that it may render important services by perfecting the operation of iridectomy.

ON THE TREATMENT OF INTRA-THORACIC ANEURISM BY THE DISTAL LIGATURE.

BY CHRISTOPHER HEATH, F.R.C.S.,

ASSISTANT-SURGEON TO UNIVERSITY COLLEGE HOSPITAL, AND TEACHER OF OPERATIVE SURGERY IN UNIVERSITY COLLEGE, LONDON.

THE patient, Julia W——, upon whom I tied the right subclavian and common carotid arteries simultaneously in the Westminster Hospital on Nov. 21st, 1865 (*vide* LANCET, Dec. 2nd, 1865, and Jan. 5th, 1867), died on Dec. 8th, 1869, from the external bursting of an aortic aneurism. By the patient's own wish, I was able to have her body removed to the Royal College of Surgeons, where it was carefully injected from the abdominal aorta, and afterwards dissected by Mr. Moseley; and the preparation will be added to the College museum.

The condition of the patient at the time of the operation was as follows:—There was a pulsating tumour at the inner end of the right clavicle, which was thrust forward. The interclavicular notch, which was obscured by the tumour, could be felt on making deep pressure with the finger. The pulsation extended above the clavicle and slightly towards the sterno-mastoid muscle. When first seen there was no bruit, but subsequently a faint bruit could be heard. The patient was pale, but well nourished; she suffered considerable pain in the tumour at intervals, was unable to assume the horizontal position without distress and dyspnœa, and had some difficulty in swallowing. The right radial pulse was smaller than the left.

The patient was examined by numerous physicians and surgeons of eminence, and the almost unanimous opinion was that the aneurism affected the innominate artery, though there was some difference as to whether or not the aorta was slightly involved in addition. In the week during which the patient was in the hospital under observation the tumour decidedly increased, the pressure symptoms became aggravated, and pain with numbness in the right arm came on. Under these circumstances, and believing the aneurism to be one of the innominate artery, I tied the right subclavian artery outside the scalenus, and the right common carotid artery above the omo-hyoid muscle, on Nov. 21st, 1865.

In determining upon tying the two main arteries simultaneously in this case, I was influenced very considerably by the arguments employed by Mr. Erichsen in his work on Surgery, wherein he shows that obliteration of *one* of the main trunks, whether by disease or ligature, has never been sufficient to effect the cure of the aneurism—except, indeed, in Mr. Evans's case, where, however, the cure depended probably upon inflammation extending to the sac. Supposing each of the main trunks to receive one-third of the whole volume of blood passing through the innominate, the obliteration of one of them will still leave two-thirds of the amount passing through the aneurism. But in addition to this, there should, I think, be taken into consideration the fact that the stream must be sent with more force through the carotid and subclavian trunks, which are the continuations of the main vessel, than into the branches of the subclavian which come off at right angles, or nearly so, to the main current. Thus, I am not surprised to find that even when the subclavian and its branches have become obliterated, the carotid being pervious, the aneurism continued to make progress, as in a case of Dr. Herbert Davies, reported in the London Hospital Reports, vol. i., where the aneurism eventually burst into the trachea. By cutting off the two main streams, and limiting the flow of blood to the branches of the subclavian artery, it appeared probable that a cure might be effected, not by the entire obstruction of the innominate artery, but by the deposit of fibrin within it and the aneurismal sac, so as to arrest the disease. Mr. Wardrop believed that the carotid was already obliterated in the case on which he first tied the subclavian for innominate aneurism; and had it been so, the result might have been different; but, as the tumour diminished, the carotid, being relieved from pressure, began to beat again, and the aneurism to make progress. In an unpublished case which M. Paul Broca has kindly communicated to me, and in which he tied the subclavian for an innominate aneurism in August, 1862, the carotid was thought to be obliterated, but proved not to be so at the patient's death in the following February, the vessel being much displaced by the pressure of the tumour, and being reduced to about half its size. In this case, however, pulsation never returned in the vessel, which was obstructed, though not obliterated; and the case therefore resembles one of simultaneous ligature of the two main trunks. The death of the patient was caused by gangrene of the lung, and was in no way attributable to the aneurism, which was filled with fibrinous clot, leaving a cavity in the centre of the size of a small fowl's egg, communicating above with the carotid and subclavian, and below with the aorta. This last case may fairly be considered a cure as far as the aneurism is concerned (though M. Broca himself speaks of it as a "half-cure" (*demi-guérison*), and it may be classed with Mr. Fearn's well-known case in which he tied the common carotid in 1836, and the subclavian artery in 1838. Here the patient died nearly four months after the *second* operation, from an attack of pleurisy unconnected with the aneurism, and due to an accident; and, as may be seen in the preparation in the museum of the College of Surgeons, the aneurism—which is a sacculated one, involving the aorta in some degree, as well as the root of the innominate artery—is thoroughly filled with laminated fibrine, a canal being left for the passage of the blood into the unobliterated branches of the subclavian artery.

My patient made a perfect recovery from the operation. Pulsation returned in the right temporal artery on the night of the operation, and in the brachial two days after. There were never any head symptoms. The tumour did not alter in size immediately, but two days after the operation the patient was able to lie down with perfect comfort; and by the third day the tumour had decidedly altered, the pulsation could not be so distinctly felt, and there was a distinct double beat, but no bruit. By the sixth day after the operation the tumour had so much diminished that the outline of the inner end of the clavicle and upper margin of the sternum could be clearly defined, the pulsation being felt both above and below the bone. By the ninth day pulsation in the upper part of the tumour had nearly disappeared. On the eighteenth day both the ligatures came away without any hæmorrhage. Attempts were made to favour the deposit of fibrine in the aneurism by the administration of the acetate of lead, by the application of ice to the tumour, and by careful regulation of the diet, but without any material advantage. The patient was discharged from hospital on March 6th, 1866, three months and a half after the operation, in good health, with no symptoms referable to the aneurism, which was now

apparent only by a pulsation through a hole in the upper part of the right side of the sternum, and not in the sterno-clavicular joint as had been at first supposed. The right radial pulse was feebly perceptible, and the circulation on the right side of the neck fully restored.

The next thing I heard of Julia W—— was that she had been admitted into St. Bartholomew's on Sunday, April 8th, dead drunk. I visited her on the 11th, and found that the tumour had diminished slightly since she left the Westminster Hospital; certainly it had not increased. The pulsation appeared the same as before.

I heard nothing further until I learnt from Mr. Hill, of the Royal Free Hospital, that Julia W—— had been brought there by the police, intoxicated, on May 10th. I visited her and found a murmur at the apex of the heart, which was not present before, and fancied the tumour to be slightly more prominent. Mr. Hill informed me that Julia W—— had been a nurse in the hospital four years and a half before, when she suffered from an attack of rheumatic fever with heart affection, and that when she left the hospital a loud mitral murmur could be traced from the apex of the heart to the axillary region. She was in the Royal Free Hospital until August 8th, under Dr. Cockle, to whom I am indebted for the following notes of her condition:—

"The chief feature of interest in the progress of the case while in hospital was the variation in the size of the tumour; it sometimes being quite flat, with scarcely any perceptible impulse, at other times becoming round and prominent, with strong impulse which could be both seen and felt. Sometimes the impulse gave a liquid, at others a solid impression. When the tumour made any sudden alteration in size it was invariably preceded by a burning throbbing pain, increase of temperature, inability to lie on the back, and a sense of suffocation, with more or less vomiting, laryngeal voice, and pain in the shoulder, face, and side of the head of the right side. These remarks refer particularly to the periods of increase only of the tumour, the decrease being unattended with any symptoms of distress. She had rheumatic pains in the limbs from time to time, which were relieved by iodide of potassium. The cardiac murmur never entirely disappeared. The right ulnar pulse was for the first time discovered on July 5th. She left the Royal Free Hospital on August 8th, when the tumour was small and flat, and the impulse very slight. The treatment adopted consisted in absolute rest, the arm being kept in a sling. Opiates were given, and sedative local applications used to relieve pain."

Julia W—— was next heard of at St. George's Hospital, where she was taken by the park-keepers, who had found her insensible in the park. She was suffering from great difficulty of breathing when admitted, but soon recovered, and only stayed in the hospital two days.

I then quite lost sight of my patient until the 8th of November, when, being informed that she was in the custody of the police for being intoxicated, I procured her admission into the Westminster Hospital, and had the satisfaction of bringing her before the fellows of the Royal Medical and Chirurgical Society on the 11th of December, 1866. On her re-admission to the hospital, a year after the operation, I found that the tumour had decidedly diminished both in size and in distinctness of pulsation, though the hole in the sternum could still be felt, and it was here that the most prominent pulsation existed. The clavicle was not so much displaced as before. The woman appeared in very good health; her appetite was good, she could walk about without distress, and could lie down with perfect comfort. She said that she had occasional attacks of dyspnœa, and that these came on when she had been drinking; and this accounts for her visits to other hospitals. There was no bruit to be heard in the tumour, nor any abnormal sound in the heart.

J. W—— continued to lead a very irregular life, and was taken by the police to almost every hospital in London; but the disease underwent no material alteration until about two years after she was under my care, when the resident officer of one of the institutions to which she was taken when overcome by drink unfortunately administered powerful emetics to her, not being aware of her condition. After this the tumour, which could before be felt beating through the sternum, became much more prominent, and gradually increased in size until the skin became involved and discoloured. I procured her admission into the St. Elizabeth's Hospital some months before her death, and she received there every kindness and attention from the authorities and from Mr. Tegart, the visiting surgeon. She then complained of constant pain in the aneurism, which was relieved by the local application of morphia, and had occasional attacks of dyspnœa and prostration. A month before her death, there having been for some time a large ecchymosis over the tumour, an arterial bleeding occurred, but this was checked by styptics. Bleedings occurred from time to time, and at last, on December 8th, 1869, she died, after a copious hæmorrhage.

On post-mortem examination the innominate artery was found to be healthy, except that it was somewhat enlarged at its origin. The arch of the aorta was extensively aneurismal. Immediately above the pulmonary artery the aorta was dilated, and presented a double pouch to the right side. Immediately above this, and extending up to, but not involving, the origin of the innominata, was the origin of the sac of the aneurism which had burst through the sternum; and externally, in front of the manubrium, was the thin-walled sac full of soft coagulum, which had given way toward the left side above. On opening the aneurismal tumour within the thorax, it was found to be a distinctly sacculated aneurism, springing from the right side of the ascending portion of the arch of the aorta, higher than appeared externally, owing to the lower part of the aneurism having grown downwards, and to the right. This portion of the sac contained firm, laminated fibrine, to the thickness of one-third of an inch. The portion of the aneurism attached to the sternum contained no fibrine, except the loose clot in the outer sac. The subclavian artery was reduced to a fibrous cord, one inch in length, immediately outside the scalenus, and the right common carotid was obliterated in the whole of its course, the point of ligature being marked by a delicate fibrous cord, and the upper inch and lower two inches of the vessel forming a flat fibrous band, nearly one-fourth of an inch wide. The collateral circulation in the arm and neck had been fully established. The preparation was brought before the Pathological Society of London on April 19th, and a more detailed description, with a drawing, will appear in the next volume of the Society's Transactions.

The preceding case appears to raise a very important question in practical medicine and surgery—whether, in cases of aneurism of the arch of the aorta, it is not possible to afford relief by surgical interference. There can be no question that my patient's urgent symptoms of dyspnœa and dysphagia were relieved by the double ligature, and that her life was prolonged very considerably under the most untoward circumstances. Dr. Cockle has already (THE LANCET, April 10th, 1869) urged ligature of the carotid in cases of aortic aneurism which are making progress in spite of medical treatment; and when the disease involves the transverse portion of the arch, I should be inclined to follow the suggestion as regards the *left* carotid. But when the disease involves the ascending portion of the arch, I believe the only hope of success will be in tying both the right carotid and subclavian, so as to diminish as far as possible the current through the innominata, agreeing as I do with Dr. Sibson in the importance of attacking the vessel next to the aneurism.

In reference to the cases of distal ligature, quoted by Dr. Cockle in his valuable paper already referred to, I may remark that both the cases of Tillanus and Rigen, in which cure of an aortic aneurism followed ligature of the carotid, were examples of ligature of the *left* carotid, the aneurism being on the transverse portion of the arch. In Montgomery's case the ligature was also on the *left* side, and the aneurism was found four months after the operation to involve the aorta between the innominate and left carotid arteries, thus supporting the view I have put forward above. In Mr. Maunder's case, in which he in 1867 followed my example of tying the two arteries on the right side for supposed innominate aneurism, the disease proved to be principally aortic, and the coagulation had extended down to the heart, and thus occasioned death. In my own case, the aneurism being more distinctly sacculated, this untoward result did not occur, nor is it to be necessarily anticipated in another case.

Before quitting the subject it may be well to note that in two cases, at least, distal pressure has given relief in

aneurisms of the root of the neck probably involving the aorta. In the *Edinburgh Journal* for October, 1847, p. 229, there is a report of a case, by Dr. Lyon, in which the patient had a large aneurism of the size of the fist, reaching upwards from the sternum, on the right side. Pressure on the carotid was made at intervals, and the tumour became more solid. The patient was of intemperate habits, and died of bursting of the sac into the pleura after twenty months. The aneurism was found to involve the innominate and aorta. There was a large fibrinous deposit opposite the attachment to the right sterno-clavicular joint, and the other parts of the sac were filled with soft coagulum. In THE LANCET of Jan. 9th, 1858, the late Mr. A. M. Edwards, of Edinburgh, has recorded a case of supposed innominate aneurism in a woman of fifty, in whom Dr. Laycock pronounced the aorta also to be implicated, and in whom great relief of all distressing symptoms was procured by the adaptation of pressure to the right common carotid and subclavian arteries. Unfortunately the termination of the case and post-mortem appearances have not, so far as I know, been published.

Cavendish-place, June, 1870.

A Mirror
OF THE PRACTICE OF
MEDICINE AND SURGERY
IN THE
HOSPITALS OF LONDON.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

KING'S COLLEGE HOSPITAL.

CASES OF SUCCESSFUL TREATMENT OF UTERINE CATARRH BY INTERNAL APPLICATION OF CARBOLIC ACID.

(Clinical Remarks by Dr. W. PLAYFAIR.)

IN a large proportion of old-standing cases of uterine catarrh it is hopeless to expect a permanent cure by any means which do not act directly on the seat of the disease, which is the lining membrane of the cavity of the uterus and cervical canal beyond the external os; accompanied, of course, with secondary morbid states of the body of the uterus and cervix, such as hypertrophy, congestion, &c. Rest, applications to the exterior of the cervix, and general treatment will unquestionably cause a temporary improvement, but on a recurrence to the old habits of life all the old symptoms return. There are serious objections to intra-uterine injections, unless the os is first dilated with laminaria tents, as they are apt to bring on severe uterine colics. By means of fine probes of whalebone or flexible metal, round which a thin film of fine cotton-wool is wrapped, alterative applications can readily be made to the interior of the uterus, without pain or danger. In the very numerous cases in which this plan of treatment has been carried out, in no single instance has anything but the greatest benefit accrued. It is no doubt advisable to select the cases judiciously, and where there is much uterine tenderness, intra-uterine treatment should be postponed until this has been diminished by rest, leeching, &c.; but with proper precautions the treatment is perfectly safe. A concentrated solution of carbolic acid, eighty parts to twenty of water, is used; and it acts so well that for a long time nothing else has been employed. After the first application the discharge is sometimes increased, but after the second or third it is generally greatly diminished, and a single application is often sufficient to cure superficial erosions of the cervix. As a rule, there is no difficulty in passing the probes, as in true uterine catarrh the os is invariably patulous. As the case improves the patulous state of the os diminishes, and this is found to be one of the most certain signs of improvement.

The following cases are selected, not because they present any peculiar features, but because each of them had been assiduously treated for lengthened periods by the ordinary methods employed, and without permanent relief, while they were rapidly cured as soon as the true seat of disease was attacked.

Mrs. P——, aged thirty-three, was the mother of four children, the youngest of whom was six years of age. Ever since the birth of her last child she had suffered from uterine diseases, the prominent symptoms being constant bearing-down pain which entirely incapacitated her for work, and a very profuse leucorrhœal discharge of a transparent gelatinous character. The latter was steadily increasing, and she became now thin and cachectic. The menstrual flow was irregular, scanty, and very painful. The uterus was large, and tender on pressure; the cervix greatly hypertrophied, and covered with a villous erosion, which bled on being touched. The leucorrhœal discharge was seen to issue freely from the os uteri. During six months the patient had attended the out-patient department of a metropolitan hospital, and during two months she had been treated generally, with occasional applications of tincture of iodine to the cervix. Her general health improved somewhat, but the uterine symptoms did not become much better, while the discharge continued unabated. She was then treated by the intra-uterine application of carbolic acid once a week, along with the application of iodised cotton and glycerine to the cervix. After the third application the discharge was much diminished, and the erosion of the cervix almost healed. In four months the patient was perfectly well; the uterus being of normal size, and the uterine leucorrhœa having entirely disappeared. She has since remained perfectly well in every respect.

M——, aged twenty-six, domestic servant, had suffered from uterine disease for four years, with constant pain, and the discharge was so profuse that it ran freely from her, and incapacitated her for work. She had, on two occasions, been an in-door patient in a metropolitan hospital for several months, gaining only temporary relief. On examination the uterus was seen to be large and heavy, the cervix greatly eroded, and the os patulous, admitting the sound with ease. A glairy discharge was pouring out abundantly. After the fifth intra-uterine application of carbolic acid, the discharge, which had continued unabated for four years, almost entirely ceased. There remained neither pain nor bearing down. The patient was able to walk a good distance, and carry weights without inconvenience, for the first time since the onset of her illness. She had gained in flesh and general health.

Mrs. K——, aged twenty-six, the mother of four children, had suffered greatly for three years from uterine disease, and had undergone a variety of treatment, including repeated leeching of uterus, and the application of potassa fusa to the cervix, without any permanent relief. She was entirely unable to walk, in consequence of bearing-down pain and profuse leucorrhœal discharge. The menstrual flow was irregular and scanty. On examination, the uterus and cervix were both greatly hypertrophied. The latter was softened, and covered with granular erosion, which bled on being touched. Much glairy discharge exuded from the os. The uterus was anteverted, and the cervix exposed with difficulty. A band of adhesion was felt in the direction of the right broad ligament—probably the remains of an old attack of parametritis. There was, however, no swelling or tenderness on pressure in that situation.

The carbolic-acid treatment was then commenced, and from the very patulous condition of the os the probes could be passed with great ease. An immediate improvement commenced. In two months the uterus and cervix were much diminished in size, the discharge lessened, and the patient was able to walk about with ease, and to attend to her duties. In six months she was perfectly well, and the probes could no longer be passed through the os, which had resumed its natural dimensions.

GUY'S HOSPITAL.

NEPHROTOMY.

(Clinical Remarks by Mr. BRYANT.)

MR. BRYANT said the case had been for some months under the care of Dr. Moxon, who had, with him, come to the conclusion that an operation should be performed. The

symptoms which had led to this opinion were, fulness, perceptible to the hand and eye, of the left loin, and corresponding dulness on percussion; pain down the loin, continued to the spermatic cord, on the same side; and the presence of pus in the urine. They all indicated a renal cyst containing pus. If the bladder be the source of pus in the urine, mixed with the pus, and often in excess of it, would be found thick, stringy mucus. In this case there was no appreciable amount of mucus. If the patient were left alone death must almost inevitably ensue. Nature herself indicated the mode of interference, for by her unaided efforts both cysts had been emptied, and stones evacuated through the loin. He proposed to make an oblique incision similar to that which he is in the habit of making in colotomy, only higher up, immediately under the lower border of the ribs. He anticipated with certainty the discovery of a pus-containing cyst, and he intended making a free external opening for the discharge of the pus. If the cyst were found to contain a stone he should, of course, remove it.

The incision was made about four inches in length, and at the site already indicated. After the superficial structures had been divided Mr. Bryant completed the operation mainly with the point of the finger, but occasionally made use of the bistoury and director. The kidney having been fairly exposed, a curved trocar was passed through its cortex, and an immediate flow of pus ensued.

The canula was withdrawn on a probe which had been passed through it into the pelvis of the kidney; and the opening through the cortex having been enlarged, the finger was introduced. No calculus being discovered, a plug of oiled lint was passed into the kidney, and a single suture introduced at about an inch from either extremity of the wound, to favour its closing up to the plug.

We propose to give further details of this case when the result of the operation is decided.

ST. MARY'S HOSPITAL.

NOTES OF A CLINICAL LECTURE ON TWO CASES OF PNEUMONIA, COMPLICATED BY NEPHRITIS, BY DR. HANDFIELD JONES.

W. S——, aged twenty-four, a painter, had had a cough for three years or more. Three weeks before admission he was taken with shivering, pain in the chest, and dyspnœa, with increase of cough. Since then he had become much worse, with increase of the latter two symptoms. The date of the actual commencement of pneumonia in this case appeared uncertain. Usually it is reckoned from the rigor; but as this had occurred three weeks before his admission, it is hardly probable that the lung inflammation, which was still extending on admission, had existed all this time. The site of the pneumonia, and its limited extent at first, as well as the subsequent spread, indicate its recent origin. Thus, on the first day, there were found at the lower part of the right lung posteriorly bronchial breathing, bronchophony, and dulness on percussion; higher up the breathing was good, but it was weak universally in the left lung. On the following day the lips were parched, the tongue furred, the sputa scanty and rusty, and the physical signs indicated that the hepatisation had extended nearly to the spine of the scapula, while at the left base the vesicular murmur was to some extent replaced by small crepitation.

On the fourth day the hepatisation was lessening in the right lung. On the fifth moist râle was heard at the base. On the sixth the bronchial breathing had disappeared. On the seventh the temperature was falling, as was the pulse; but on the eighth both were still febrile (pulse 105, and temperature 100·4°), and the same on the ninth day. On the eighth both lungs were free, with the exception of some crepitations at the right base. On the tenth the pulse and temperature were normal, and the disease may be said to have come to an end. This summary shows positively that the inflammatory exudation was in great measure resorbed before the pyrexia ceased.

An important complication observed on the third day was nephritis in a well-marked form, evidenced by the deep-coloured, smoky appearance of the urine, which deposited a considerable amount of brownish sediment, consisting of red globules, brownish pigment, granular pigmentary casts, larger non-granular fibrinous casts, and a slight amount of albumen. Indeed, it presented precisely the same characters as in cases of nephritis after scarlatina; but there was no history of any such recent affection, and though the point was not specially investigated, it seemed to Dr. Handfield Jones very unlikely that, had the patient suffered from this malady, he would not have mentioned it. On the first day nothing was given but a saline diuretic; the intention being to see how the disease would act if left pretty well alone. The next day six leeches were obliged to be put on to relieve the pain in the right side and back. Ipecacuanha and opium were also given freely. The third day his pain was relieved, but his respiration was more frequent, and the state of the urine, as well as his general condition, made it clear that tonic medication was urgently needed. The solution of muriate of iron was administered pretty freely, and it seems not doubtful that it acted very beneficially. It told, however, much more on the local changes than on the general pyrexia. In seventy-two hours after it was first taken, the left lung, which had been in some measure involved, was quite free, and the right was clearing up rapidly, bronchial breathing having ceased, and crepitatio redux being heard all over the back; also the urine had become nearly natural; but the temperature and the pulse were still high—103·4° and 116 respectively. The intention with which the iron was administered was to sustain the flagging force of the heart's action, and to contract the dilated arterioles and capillaries in the inflamed lung and kidneys, and so diminish the hyperæmia which supplied the exudation. These objects it accomplished very well, but it seemed at the same time to render the expectoration more difficult, especially at the upper right front, where special uneasiness was felt. The salutary effect of the drug in such cases as this is closely paralleled by its action in erysipelas. The diet was generous, and six ounces of brandy were ordered at the same time as the perchloride of iron.

The second case is that of H. M——, aged twenty-five, a baker. He was taken ill at 3 A.M. of the day of admission, after working all night. He was habitually much exposed to alternations of heat and cold. His first symptom was pain in the left side of a sharp character. Shivering came on at 8 A.M., while he was out, and lasted an hour and a half. On admission in the forenoon his temperature was 103°; his pulse some hours later 117, large and soft. Eight leeches were applied to the seat of pain. On auscultation Dr. Handfield Jones found no positive evidence of morbid action; the breathing was fairly good throughout the right lung, at the left posterior base it was weak and imperfect, but at the seat of pain only some roughening of the breath-sound could be heard. The expectoration was markedly blood-tinged. A linseed poultice was applied to the left side, and a draught, consisting of ipecacuanha, opium, and nitrous ether in acetate of ammonia solution, was ordered. On the following day the pulse was 135, excited and rather tense; the temperature 104°; the urine dark-coloured, with a dark sediment consisting of renal particles, and short, wide, distinctly pigmental casts of a specific gravity of 1013, and not albuminous, or only very slightly so. The addition of five grains of nitrate of potash to the draught was ordered, and four ounces of brandy. On the third day there was only slight pain on cough, and the expectoration was muco-watery, and but little stained; the pulse 126, weak; the temperature 104·8°. The urine was of very dark colour, and highly albuminous; the air entered into the right lung tolerably well posteriorly, and on the left side it entered very feebly and imperfectly, only some obscure râle being audible. Twenty minims of the muriate of iron solution every three hours were now ordered. From that time the pulse improved, and on the second day the temperature began to decline, while the urine gradually resumed its normal characters; but the cough became hard and remained troublesome. Four days after the first administration of the iron the pulse was 70 and weak; the temperature 97·9°; the left side was free from pain; the urine quite clear, and light coloured; and the patient slept well. The next day the urine was free from albumen, and the resonance and breathing good on both sides posteriorly, though the expiration was rather

prolonged at the right base. He continued to make a good recovery, and shortly left the hospital. With regard to the albuminuria he affirmed that he had not been in the way of scarlet fever; he certainly on admission presented no traces of sore-throat, or of eruption.

This man's illness extended over about six days, reckoning from its commencement to the time when defervescence was complete. The temperature was declining two days before it reached its lowest point; subsequently it rose a little. The lung affection was more marked by general signs than by physical, but there is no doubt that pleuritis of the left side existed, as well as considerable congestion of that lung, though actual hepatisation does not seem to have occurred. The renal inflammation seems to have set in together with the pulmonary, and both terminated nearly at the same time. It seems most probable that they had a common cause. How far the earlier part of the treatment was beneficial is not clear. It is noteworthy that consolidation of the lung did not occur, and that the pyrexial period was of short duration. In any case, Dr. Jones believed it was a prudent preliminary to the administration of iron, which in the form of the ammonio-chloride was certainly to all appearance of much service, just as it so frequently is in cases of scarlatinal dropsy.

Reviews and Notices of Books.

A System of Surgery, Theoretical and Practical, in Treatises by various Authors. Edited by T. HOLMES, M.A. Cantab., Surgeon and Lecturer on Surgery at St. George's Hospital. Second Edition. In five Volumes, with illustrations. Vol. III. London: Longmans. 1870.

THE third volume of Holmes's System of Surgery, which has appeared with commendable promptitude, contains the articles on Diseases of the Eye and Ear, of the Organs of Circulation, Muscles, and Bones. Mr. Dixon's article on Diseases of the Eye has been removed from the second volume, and has been extended from 222 to 256 pages, being illustrated by eight woodcuts and three chromo-lithographic plates of the ophthalmoscopic appearances of the eye. The paper is divided, as before, into chapters, and two new ones are prefixed to it in which optical defects and the methods of examining the eye are discussed. These give a good account of the several diseases of accommodation, upon which so much light has been thrown of late by Donders and others, and explain the use of the ophthalmoscope; these matters finding their place more appropriately at the commencement than in the body of the paper, as in the first edition. The chapter on Diseases of the Lens and its Capsule is that in which the principal alterations appear, and here the author has, in addition to the old flap operation of extraction, described the more modern proceedings known as linear extraction (Mr. Dixon prefers to call it "rectilinear"), removal by suction, scoop extraction, modified flap extraction, and extraction through the sclerotic. We regret that no woodcuts have been introduced here, to illustrate the various operations described, and in this respect the work contrasts unfavourably with Sédillot's recent edition. The chromo-lithographs are good, and serve as well as most to illustrate diseased conditions of the fundus of the eye.

Mr. Hinton's article on Diseases of the Ear has received only slight additions, which have reference principally to the middle ear. The author upholds the operation of incising the membrana tympani in certain cases, and finds great benefit accrue from washing out the tympanum both after incision and in cases of perforation by ulcer. Politzer's method of inflating the Eustachian tube is described and figured, and some useful remarks are made upon the "phenomena observed by the tuning-fork"—we presume, rather, by the surgeon who uses that instrument.

The article on Diseases of the Absorbent System, by the late Mr. Charles Moore, though submitted to the revision of its author, has not undergone any material alteration. We may notice that, under the head of treatment of inflamed lymphatics, no mention is made of the local application of belladonna—a remedy of undoubted service in this affection.

The papers on Diseases of the Veins, by Mr. Callender, and on Diseases of Arteries, by Mr. Moore, have not undergone any modification of importance.

The article on Aneurism by Mr. Holmes was one of the best in the work, and has now been increased by some thirty pages, and been brought up to the present day as regards statistics. It is illustrated with thirteen woodcuts. We cannot but regret the adoption originally of a nomenclature as regards the terms "true" and "false" aneurism, which always leads to difficulties, and is not founded upon any really practical distinction; but the author has done his best to avoid ambiguity by printing a table, in which the terms used in the essay and those employed by M. Broca and Mr. Erichsen respectively are placed in parallel columns. In addition to discussing fully, as in the previous edition, the pathology of aneurism and its various methods of treatment, the author has considered the use of acupressure and temporary ligature, as recently proposed, neither of which, he thinks, has any great advantage to boast of. He also discusses the method of treatment by total compression of the main artery under chloroform, shows that it is chiefly applicable to the abdominal aorta. The method of introducing wire into the sac of an aneurism, employed by the late Mr. Moore in one case, is also noticed. The portion of the article referring to aneurisms of the root of the neck has been considerably expanded, and the author discusses at length the advantages claimed for the distal ligature of one or both of the main trunks. He alludes to Mr. Fearn's and Mr. Heath's well known cases of double ligature, giving a drawing of the preparation of the former, and appending a table compiled by the latter gentleman of all the known cases of distal ligature for aneurisms of the root of the neck. The ligatures of the several arteries are described, and in an addendum is published a report of a unique case in Dr. J. Kearney Rodgers, of New York, who tied the left subclavian in the first part of its course, the patient dying on the fifteenth day of hæmorrhage. There is a table to show the exceptional frequency of aneurism among female prisoners—a very interesting inquiry; but the value of the data is nullified by the absence of information as to the ages of the male and female convicts respectively.

The article on Affections of the Muscles, by Mr. Tatum, has been edited by Dr. Lockhart Clarke, who has especially expanded that portion relating to atrophy and degeneration of muscle, bringing all the light of modern research to bear upon this important subject.

Dr. Little's able article on Orthopædic Surgery remains very much as it was, and is illustrated by thirteen wood engravings.

The volume concludes with the article on Diseases of the Bones, by Mr. Holmes. Some additions have been made, and some very excellent drawings have been added, showing the various alterations which bone undergoes in disease. The author expresses himself very warmly in favour of subperiosteal resection in case of necrosis of a long bone, but hitherto that operation has not been much practised by English surgeons.

The volume, taken as a whole, is of great value, and the articles are such as to reflect credit upon their several authors and upon British surgery. The fourth and fifth volumes of the work may, we learn, be shortly expected.

Traité de Médecine Opératoire, Bandages et Appareils. Par L. SÉDILLOT et CH. LEGOUEST. Quatrième Edition, avec figures intercalées dans le texte. En deux Volumes. Paris: Baillière. 1870.

M. SÉDILLOT, the author of this well-known French work on operative surgery, has, in this his fourth edition, associated with him in his labours M. Legouest, a distinguished professor at the Imperial School of Val-de-Grâce, whilst in the ophthalmic department of the work he has received the assistance of M.M. Stœber and Monoyer. The work is somewhat increased in bulk, the first volume having grown from 588 to 645 pages, and the second volume from 685 to 794 pages. The number of illustrations has been increased, especially those of the operations on the eye, which are, many of them, of life-size, and very ably executed. The coloured printing by which the arteries and veins are so clearly shown, and which was first introduced in this work, is continued, and we are surprised that the method has not found its way into this country.

The several articles appear to have been fairly brought up to the level of the knowledge of the day, though the work is necessarily a reflection by preference of French surgery. Although apparently acquainted with the current English surgery, particularly as represented in the columns of THE LANCET, to which there are frequent references, the authors appear to be ignorant of some points of practice which have been embodied in distinct works. Thus, on the subject of the radical cure of hernia, whilst no fewer than five-and-twenty methods are described, Mr. John Wood's name is entirely omitted; Morell Mackenzie and Gibb are conspicuous by their absence in the article on Growths in the Larynx; and neither Sir William Fergusson nor Sir Henry Thompson is mentioned in connexion with Lithotomy and Lithotrity. Our English names are, no doubt, puzzling to foreign printers, and in this work appear sometimes in ludicrous form. Still, these are only minor defects, and do not detract much from the value of the book as a work of reference.

OUR LIBRARY TABLE.

Brinton: Traité des Maladies de l'Estomac. Traduit par A. RIANT, M.D. Paris: 1870.—This is an admirable translation of the late Dr. Brinton's well-known work by an accomplished young Parisian physician, Dr. Riant. The value of the work is enhanced by an introductory chapter from the pen of Professor Lasègue, which contains a critical analysis of Dr. Brinton's work, worthy of perusal by the English reader.

Notes on the Treatment of Skin Diseases. By ROBERT LIVEING, A.M., M.D. Cantab., Demonstrator on Diseases of the Skin, and Assistant-Physician to Middlesex Hospital. Pp. 90. Longmans. 1870.—This is a handy little compendium upon skin diseases, and discusses briefly their etiology, diagnosis, treatment, and classification. The author is evidently a disciple of Hebra, and adopts many of that Professor's views as to pathology and treatment. His directions are plain and to the point, and the formulæ collected at the end of the volume are numerous and well-selected. Altogether, Dr. Liveing's unpretending little volume is a safe pocket guide to the treatment of a common class of affections, and is, we are happy to say, free from all that "claptrap" with which some modern works on the same subject have unfortunately been disfigured.

Public Health: a Popular Introduction to Sanitary Science. By WILLIAM A. GUY, M.B. Cantab., F.R.S., &c. London: Renshaw. 1870.—We are glad to see that Dr. Guy has brought together, in a compact little volume, the eight lectures which he delivered a short time since, in his capacity of the first Professor appointed by the Council of King's College to fill the chair of Hygiene which they had established. We noticed several of these lectures at the time of their delivery, and we are sure that all who read them in their present shape will acquiesce in the opinion we then expressed as to their great merit.

Alpine Flowers for English Gardens. By W. ROBINSON, F.L.S. London: John Murray. 1870.—Mr. Robinson has written this book to dispel what he has found to be a very general error—namely, that the exquisite flowers of Alpine countries cannot be grown in lowland gardens. We know a garden within four miles of Charing-cross, where scores of Mr. Robinson's pets flourish as though to the manner born, and we entirely agree with him in his preference for a kind of gardening which aims at natural rather than at artificial effects. Numerous illustrations assist the letter-press in conveying the author's ideas, which are, moreover, expressed in a manner that is very agreeable to read. The book is altogether well got up, and any of our professional brethren whose tastes lie that way will find it a pleasant companion for a leisure hour—if they ever have one.

THE HISTORY OF ANÆSTHETIC DISCOVERY.

III.

THIRD CHEMICAL STAGE: DISCOVERY OF CHLOROFORM AS AN ANÆSTHETIC.

THE substance known as chloroform, to the discovery of which, as an anæsthetic, we are now led, was introduced to the world of science in the year 1831. Three chemists appear to have nearly equal claims to the credit of the introduction. These are Mr. Samuel Guthrie, of Sacket's Harbour, New York; Soubeiran, in France; and Liebig, in Germany. Guthrie named the substance "chloric ether"; Soubeiran, "liquid bichloric ether"; and Liebig, "liquid chloride of carbon." It is quite certain, from his description of the liquid he obtained, that Guthrie made pure chloroform; and that his contemporaries were impressed with the importance of the discovery and its relations to medicine is clear from the observation of Mr. Daniel B. Smith, of Philadelphia, who, in the Journal of the College of Pharmacy, in 1832, says of this substance:

"The action of this ether on the living system is interesting, and may hereafter render it an object of importance in commerce. Its flavour is delicious, and its intoxicating qualities equal to or surpassing those of alcohol. It is a strong diffusible stimulus, similar to hydrated ether, but more grateful to the taste."

Three years after the discovery of this agent it was investigated by Dumas, who named it chloroform. Liebig, making a new inquiry, and confirming Dumas, re-named it perchloride of formyle, by which name it is still known in the chemical world; but the simple word chloroform has found most favour, and, indeed, has been incorrectly extended by the public to all and every substance which produces anæsthetic sleep.

It has been asserted that from the time of the discovery of chloroform by Guthrie until its application as an anæsthetic vapour it remained a mere chemical curiosity. This is not correct. In 1831 Professor Ives, of Newhaven, employed chloroform in a case of difficult respiration, administering it actually by inhalation of its vapour; he afterwards published the facts in *Silliman's Journal* for January, 1832. Later Dr. Nathan B. Ives employed it in asthma, and in other cases, reporting upon it favourably. In 1838 Dr. Formby, of Liverpool, prescribed it in hysteria. In 1844 Mr. Tuson, of London, used it for the treatment of cancer and for neuralgia; and in 1844 M. Guillot, of Paris, followed N. B. Ives in employing it as a remedy for asthma.

In March, 1847, when etherisation was the event of the

day, M. Flourens undertook an investigation relative to the action of vapour of chloroform on animals. His researches were marked by all that exactness which has ever distinguished him. Strangely, he came to a conclusion unfavourable to chloroform, so that from his experiments no direct practical result accrued.

Meanwhile, in England especially, many were at work endeavouring to obtain a better, and it was even hoped a safer, agent than ether; for one or two deaths were attributed to ether not long after its introduction here, and it was found that there were difficulties in the way of administration which interfered with readiness of action. Foremost amongst these investigators were Dr. Simpson of Edinburgh, and Dr. Snow of London, the former having more facility for research, and taking the lead. Simpson studied the action of various chemical fluids, amongst others, chloride of ethylene or Dutch liquid, acetone, nitrate of oxide of ethyle, benzin, and vapour of iodoform. For one reason or other, he cast them all aside as wanting in some required quality.

While the experimentalists were thus actively engaged in their careful and refined studies, simpler men were aiming, not to supplant, but to improve ether. Of these the most successfully prominent was the late Mr. Jacob Bell, the head of the firm of Bell and Company, in Oxford-street, the editor of the *Pharmaceutical Journal*, a staunch representative in the Pharmaceutical Society, and in the world generally a truly representative man. Mr. Bell, then, in his way suggested that the substance known as chloric ether should be used for inhalation instead of rectified or sulphuric ether. The suggestion was acted upon, but it is very doubtful whether it would have held any long place in its original form; nevertheless it served a useful purpose, as will be presently seen.

Dr. Simpson, moving from one substance to another, and asking, as was his wont, on all sides for information, asking the chemists especially what they knew or how they could help, had a talk in October, 1847, with Mr. Waldie, of the Apothecaries' Hall, Liverpool, during a visit of that gentleman to Edinburgh. Waldie, in a pamphlet on chloroform, published in 1847, tells us precisely what occurred. Dr. Simpson asked him, he says, (speaking of new anæsthetics) if he knew anything likely to answer. Chloric ether was mentioned during the conversation, and being well acquainted with its composition—it was a solution of chloroform in ether—and with the volatility, agreeable flavour, and medicinal properties of chloroform, he (Waldie) recommended Dr. Simpson to try chloroform, promising to make him some on his return home. This statement by Mr. Waldie is confirmed by Dr. Simpson himself, who, in a note to his first paper on chloroform says, Mr. Waldie first named to him the perchloride of formyle (chloroform) as worthy amongst others of a trial. Thus it is clear enough that the first suggestion of the use of chloroform as an anæsthetic came from Mr. Waldie.

Shall we, upon this acknowledged fact, in any sense, take away from the credit due to Professor Simpson? Impossible. It was Simpson who was looking for the new agent; it was Simpson's inquiry which led Mr. Waldie to think and suggest; it was Simpson who experimented with chloroform to prove it an anæsthetic; and, lastly, it was Simpson who accepted the responsibility of the first administration and first introduction. The truth all told, Simpson stands out fully the actual and the practical discoverer of chloroform as an anæsthetic.

The first paper on chloroform was communicated by Dr. Simpson to the Medico-Chirurgical Society of Edinburgh on Nov. 10th, 1847. It was, perhaps, the shortest paper ever written on a subject that was to be so great in importance. It fills but twenty-three short pages of matter, and it tells a story that has become history, in language as forcible as it is unaffected.

The news of the discovery created an interest at the time little less than the discovery of anæsthesia itself. The demand for chloroform did in truth create a commerce which Mr. Daniel Smith, of Philadelphia, who spoke so shrewdly in 1832, hardly had dreamed of. In every hospital, in every private practice, chloroform ranked at once as a remedy; and for twenty-three years it has been the most widely dispensed of all the agents sent forth for the relief and cure of disease and pain.

There is nothing more to be said, as matter of history, respecting the discovery of chloroform and its application as an anæsthetic. The facts are so simple, clear, and unmistakable, that the future historian who shall read them as we have rendered them need feel no doubt. But some comment has been raised, and will be raised further, on the question whether the introduction of chloroform was on the whole useful. Some American and some French authors of good repute, men of sound and practical knowledge, have urged that ether, when skilfully applied, is perfectly manageable, and much safer than chloroform. The greater safety of ether is a fact acknowledged on all hands; but the perfect and easy management of it is not acknowledged as even to be compared with the management of chloroform. Thus we are placed in the difficulty, in accepting chloroform in preference to ether, of allowing convenience to supersede safety. Snow put the position admirably on one occasion. He was asked why he employed chloroform instead of ether while he held ether to be the safer agent of the two. "I use chloroform," he said, "for the same reason that you use phosphorus matches instead of the tinder-box: an occasional risk never stands in the way of ready applicability." The truth spoken by Snow is one very generally felt, though rarely expressed with so much terseness and candour. But, confessing that the introduction of chloroform has increased the mortality due to general anæsthesia, we are bound, after all, to accept it as an advance. It is just possible that if no such new agent had been discovered the practice of general anæsthesia would have fallen into disrepute, instead of progressing, as it has progressed, until it has become universal. Moreover, the introduction stimulated curiosity for new research, and led to the conviction that an immense number of other chemical bodies possess analogous narcotic properties, some perchance having all the value and none of the evils of chloroform; nay, that there yet remains to be discovered by the patient inquirer an agent which shall do all that chloroform does for annulling pain, and yet shall inflict no further danger than is inflicted by that natural sleep which restores the daily life, and is great Nature's second self.

LATER RESEARCH.

The mention of the discovery of new agents for the production of anæsthesia leads us in a few concluding sentences to touch on the labours of one or two other workers than those who have, up to this time, so conspicuously occupied the page. It is gratifying to our national pride to know that every important advance has, up to the present time from the year 1847, originated in England; and that as the modern method of removing pain during surgical operations began here from the suggestion of Sir Humphry Davy, so in this island it has most developed and most attained to the quality of a science.

The principal mover in anæsthesia, after the discovery of ether and chloroform, was Dr. John Snow. We have often named him incidentally; but he deserves far more than incidental notice. He was the man, in fact, who raised the

practice of anæsthesia out of empirical mass into figure and shape and life of scientific truth. In this direction, moreover, he raised therapeutical research altogether out of empirical mass into figure and scientific truth. He was made for the effort. With less impulsive vigour than Simpson—with less versatility, and probably less keenness of perception, Snow had qualities which Simpson had not, and few have. He had a patience that was inexhaustible, a devotion for labour unsurpassed, a slow but sure and reticent comprehension and comprehensiveness which was not easily seen because of its silence and massiveness. In his time he was by heads the best physicist of all physicians acting as physicians; he combined with a stolid firmness distinctively Saxon, a rare genius for penetration into the obscure, for casting aside apparent objects which are coincident or accidental, and for seizing determinately the realities for which he sought. His researches on cholera are master works of medical learning, second to none in other learnings: and his researches on anæsthesia deserve, though he thought less of them, the same commendation. In dealing with narcotic vapours, to be used by inhalation, he studied physiological action on physical principles. He calculated specific gravity, vapour density, tension, liquid and gaseous diffusion, and chemical constitution. He had always a definite project before him for perfecting the anæsthetic process, and he marked out the symptoms or phenomena which characterise narcotism from vapours with such care that the student can, in a few observations, learn and formularise each degree or step of the sleeping process. Snow added two new anæsthetics to medicine—viz., amylene (C_5H_{10}) and the mono-chlorinated chloride of ethyle ($C_2H_4Cl_2$.) The first, which he administered a great number of times to the human subject, appeared to approach in action an agent which shall completely destroy sensation without destroying consciousness, and for some months he thought he had discovered the agent he was most anxiously asking for. Unfortunately two deaths from amylene occurred to dispel his hopes, and he thereupon gave up the administration. The second substance promised excellent results, and no accident attended its employment; but there was a difficulty in obtaining it in quantity, and for that reason he gave up the use of it and returned to chloroform.

Another original inquirer, hardly less industrious than Snow in the investigation of new anæsthetic agents, was the late Mr. Nunneley, of Leeds. Nunneley experimented with more than forty substances, and the conclusions he arrived at are, we may say, as perfect as they can be. His descriptions were not so clear as those by Snow, and his style lacks the rebounding fulness which characterised the writings of Simpson; but his analyses of experimental results, his comparisons of one agent with another, his rigid adherence to nature, and his boldness in experiment, all combine to tell the story of a great and careful scientific observer. Nunneley discovered several new anæsthetics, particularly bromide of ethyle and chloride of carbon. He was of opinion that bromide of ethyle was the best known anæsthetic, least irritating, and most effective. He retained this opinion; and in March last, when we had the pleasure of a day or two with him, and we were putting side by side experiences, he expressed to us his still firm conviction of the correctness of his original estimate of this chemical substance. The work performed by Nunneley was manifold. He broke through the notion long prevalent that anæsthetics could only be found in a limited class of chemical compounds. He reasoned ably on the relation of physiological action to elementary composition, and he dealt with the question of the *modus operandi* of anæsthetics with judgment, knowledge, and insight rarely excelled.

It was duty to pay these tributes to two men who have played leading parts in the later history of anæsthetic discovery, and who are silent now. We shall touch on none other; we need touch on none other, for those who yet live have more work to do—may indeed revise their work, and may be left for some fair and firm hand in the future to speak of, as we have tried to speak of them who are not here.

No! Still, before we finish our task, the brain charges our willing hand with one more message. In the advancement of the science of anæsthesia, there has been a useful departure, applicable in many cases, from the general to the local method of abolishing pain. It is no part of our present plan to enter on this subject, but we could not cease to write without paying both recognition and tribute to the pioneer in this new path, whose genius lightens up every work of his hands, and whose hands have been ceaseless in work that is worthy. His name shall close, as it shall adorn, our record; it is that of Dr. James Arnott.

Foreign Gleanings.

ACUTE SPINAL PARALYSIS; ANTI-SYPHILITIC TREATMENT; CURE.

THIS case is recorded in the *Med. Centr. Zeit.* of Berlin, and is remarkable for the clear syphilitic history. The patient was an officer thirty-five years of age, who, after running through a mild syphilis, had a gummy tumour over the first dorsal vertebra, which caused some stiffness in the neck. This tumour became less and almost disappeared in a twelvemonth, when another formed on the skull, at the junction of the left frontal and parietal angles. It reached a large size, and was painful; walking became difficult, and finally paralysis of the arms set in. A mercurial treatment, coupled with the use of galvanism to the affected limbs, restored him completely.

DYSTOCIA DEPENDING ON THE SIMULTANEOUS PRESENTATION OF THE TWO HEADS OF TWINS.

Dr. Rinter was called by a midwife to a woman twenty-eight years of age. In this case the child's head, after a breech presentation, was locked by complete absence of uterine contraction. Dr. Rinter found the whole child born save the head, the uterus inert, and the mother very feverish. The child was dead, and in vain did the accoucheur try to find, with his finger, the chin or the mouth; he could only feel the cranial bones without succeeding in making out the sutures. By the hand laid on the abdomen the presence of a second fœtus was made out. Tractions on the trunk of the child already extruded were unsuccessful. At last the forceps were used, and with much difficulty the head was extracted; but the operator was dismayed on seeing that it belonged to the *second* fœtus. The cord was soon divided, and a living boy handed to the nurse. The head of the *first* child was now sought for, the chin and mouth easily found, and the extraction effected. The placenta followed immediately; it was very large, and common to both children. The mother did well. Happily Dr. Rinter did not resolve to *diminish* the head when he found it so completely locked, and the child dead.—*Gaz. Méd. de Strasbourg.*

EFFECTUAL PLUGGING IN EPISTAXIS.

It is generally expected, when the anterior and posterior nares are plugged, that a clot forms on the floor of the nose which compresses the oozing vessels. M. Fano, of Paris, endeavours to compress with more certainty in the following manner:—Instead of tying a pledget of cotton or lint to the free end of the thread which has been made to enter at the nose and emerge from the mouth, M. Fano ties a series of little pledgets along that string, in the same fashion as papers are tied to the tail of a kite. The string, being now pulled from the nasal end, is made, by a little management on the velum, to pass behind the latter with its four or five pledgets, until the latter are fairly lodged in the nose, the last pledget of course occluding the aperture of the posterior naris. The front may be plugged as usual. The whole is left four days, and the success, in cases cited by M. Fano, has been remarkable.

THE LANCET.

LONDON: SATURDAY, JULY 2, 1870.

ONE of the last remaining links between the old order of the profession and the new has just been dissolved by the death of Sir JAMES CLARK. Lovers of historical parallels will find much in Sir JAMES'S career to remind them of a still more famous physician at Court, Dr. JOHN ARBUTHNOT. Like the doctor, Sir JAMES was a Scot, a native of that north-eastern strip of the island which has sent down so many an athlete to the arena of thought and action; like the doctor he was educated at the University of Aberdeen; like him, too, he migrated southwards at an early age, determined to find or force a way to fame and fortune. He was born, a farmer's son, in Banffshire, in 1788, and after a course of study at King's College, he entered the Royal Navy as a surgeon, in which capacity he served with distinction for several years. By a happy instinct, he settled, in 1820, as a physician in Rome, then, even more than now, one of the centres of European diplomacy and high life. There he acquired the courtly manners, the graceful reserve, the refined knowledge of the world, so eminently characteristic of a society to which Cardinal CONSALVI gave the tone; there, too, he formed that experience in climate and its hygienic conditions which afterwards served him in such excellent stead. Six years of life in the *beau monde* of the Eternal City were an admirable preparation for practice in London, where he soon rose in aristocratic favour, and was appointed physician to the King of the BELGIANS. On the death of Dr. MATON he became medical adviser to the Duchess of KENT and the Princess VICTORIA, who, on her Majesty's accession to the throne, conferred on him the honour of baronetcy. He was also made physician in ordinary to the Prince Consort, and from that time till his death was a highly esteemed and greatly trusted counsellor at Court. His versatile accomplishments and his fine scientific talent were of material value to the Prince, who continually sought his advice in those agricultural and educational projects which engaged so much of the time and attention of "ALBERT the GOOD." All this time, too, while enjoying at the Court of Queen VICTORIA an even larger share of his Sovereign's confidence than was vouchsafed to Dr. ARBUTHNOT by Queen ANNE, he never lost sight of the interests of his own profession, and contributed much by his example and counsel to improve the literature of medicine. He co-operated effectively with the late Sir JOHN FORBES, another Court physician, in the establishment and conduct of the *Medico-Chirurgical Review*, and assisted most ably in the consummation of those salutary reforms with which posterity will associate the names of ANDREW COMBE and JOHN CONOLLY. His journal, which we believe he kept with regularity, will not only have a historical interest, similar to that of SWIFT'S in its notices of ARBUTHNOT, but a scientific interest peculiar to an age so rich in the results of inductive research. His correspondence with the *savants* whom the Prince Consort's scientific tastes attracted to the Court will form a valuable record in itself; while his biography, when it comes to be written, will have the especial attractions of a life exemplary for its industry, its judicious bestowal of effort, its masculine simplicity, and its high moral tone. Sir JAMES CLARK'S career may be quoted as another instance of what sense of duty, combined with solidity of judgment and force of character, can achieve in spite of the disadvantages of birth, of one-sided education, and of the absence of personal influence; and though the blank he leaves in pure science or professional efficiency is far from irreparable, it will yet be the universal feeling that an accomplished physician, a sagacious counsellor, a high-minded and polished gentleman was removed from the Court and from the country when, full of years and honours, Sir JAMES CLARK went down to his rest.

WE print elsewhere a letter from Dr. PROTHEROE SMITH on the subject of the SIMPSON memorial. The meeting at Stafford House, to which it refers, was an extraordinary tribute to the pre-eminent merit of the illustrious dead; and it is a matter of national concern that the action of such a meeting should be wisely directed. Sir JAS. SIMPSON lately made himself conspicuous by his out-spoken denunciation of certain evils which he imagined to arise from the aggregation of surgical cases in hospitals; and he pushed his views to the extent of maintaining, or at least of suggesting, that hospitals were evils that should be avoided. On these grounds, it was urged at Stafford House that a special hospital for women would be an unfitting tribute to his memory.

Dr. PROTHEROE SMITH undertakes to show, on the contrary, that a hospital for women would be a charity of which Sir JAMES would have cordially approved, and he quotes a letter clearly establishing that this was at one period strictly true. Nothing can be more emphatic than Sir JAMES SIMPSON'S own words. But those words were written nearly twenty-eight years ago, when the question of hospitalism had not even appeared upon the medical horizon; and they have no applicability to the question now at issue. Dr. PROTHEROE SMITH affirms, indeed, that Sir JAMES SIMPSON'S views were substantially unchanged in 1867. This is more to the purpose as regarded from one point of view; and it would be more to the purpose still if we knew the opinions held by the great master in the present year, immediately before he was removed from us. But the question is, after all, one in which it would be very easy to attach too much weight to these opinions; and we do not think SIMPSON'S memory would be honoured by any merely blind idolatry of them. There can be no doubt that it would be a fitting tribute to one whose life was spent in healing if we should now make arrangements by which, for all time, the relief of sickness might be associated with his name. At present this can only be done by a hospital; and SIMPSON'S recent labours were neither carried to the extent of showing that the evils attendant upon hospitals outweigh their benefits, nor to the extent of suggesting any really practicable substitutes by which hospitals may be replaced. It is plainly manifest that the aggregation of

the sick is not in itself desirable, that it is only carried into effect as a means of economising the skilled labour of surgeons and nurses, and that it must have its attendant evils. It was not the least of SIMPSON'S good works that he called attention to the magnitude of these evils, and showed that they were sometimes so great as to stand out in ugly prominence against the benefits with which they were associated. The immediate effect has been to occasion strenuous efforts to trace out and diminish their causes; and there can be little doubt that the rate of hospital mortality will consequently decrease. We think, therefore, that a hospital will form a fitting portion of the proposed memorial.

The question may next be asked whether the hospital should be a general or a special one; and on this point the letter to Dr. RIGBY seems to us to be conclusive. SIMPSON was much more than what it is now fashionable to call a "gynæcologist"; but his practice was sufficiently special to bring prominently before his eyes one particular class of sufferers, and to render him solicitous for their relief. There will, therefore, be no narrowness in a proposal to render them the recipients of the bounty hereafter to be dispensed in his name; and to associate it throughout all time with the lightening of their often grievous burdens.

There are two points, however, on which it would be difficult to insist too strongly. In the first place we must not, on any pretence whatever, have a lying-in hospital. Experience has shown that in all such institutions the evils far outweigh the benefits; and that their existence cannot be justified by any plea of collateral or incidental advantage. In the next place, the funds subscribed for the hospital should not be spent upon a permanent and palatial structure; but upon the reception and treatment of patients. The progress of inquiry may yet teach us much with regard to hospital construction; and we think it would be to put dishonour upon SIMPSON'S latest investigations if we were now to suffer an architect to fix, in costly materials, what might be the very faults from which he most recoiled. The question of hospitals is in a transition state; and, while it remains so, it will be best to put up only an inexpensive and an unpretentious structure, and to let the cured patients who issue from its doors serve as the real and best monuments to a fame that can never die.

THE meeting of Fellows and Members of the College of Surgeons on Tuesday last was both "small and early," there being about seventy gentlemen present at the end; and the whole proceedings occupying just one hour. Our readers will learn from the report of the proceedings at another page, that the proposer and seconder of the resolution affirming the desirability of restoring Clause 18 had no especial novelty to bring before the meeting; and the only remarkable fact was that Mr. BUSK, who was put up as the spokesman of the Council, should have gone out of his way to state that there were other unsatisfactory provisions in the proposed Bill, which, if he had been allowed, he would have discussed, mentioning particularly the "inadequate representation of the corporations" in the General Medical Council. Mr. GAMGEE and other gentlemen naturally took advantage of Mr. BUSK'S avowal to endeavour to discuss the possibility of extending the representation of the profession; but Mr. COCK'S ruling against any such interpolation was at once respected. Mr. HEATH, however, at a later period, again referred to Mr. BUSK'S words; and, whilst expressing some grateful surprise at them, showed that the present inadequacy of the representation of the College of Surgeons was due both to there being only one representative for a corporation of some 17,000 Fellows and Members, and to the fact that the election was usurped by the Council, who were preparing to elect a representative for five years on the 4th of July. Mr. BUSK'S reply showed how imbued he is with the spirit of office, and what a narrow view he takes of medical reform. Whilst allowing that the number of representatives was inadequate, he entirely pooh-poohed their being elected by any but the Councils of the corporations; so that, probably, if Mr. BUSK had his way, and the number of representatives of the College of Surgeons was increased, they would still be elected *by* the Council *from* the Council, and would naturally support the interests of the Council when opposed to those of the corporation.

The draft petition which the President was authorised to sign puts together very well the most important points in favour of the restoration of Clause 18. The consequences of its omission are summarised as: interference with the much-desired one-portal system; a granting of diplomas which will be presumed to be legal qualifications to practise; and the maintenance of the present injurious system of competition between corporations. The absolute non-necessity for any provision by which men of science may obtain medical degrees on easy terms is shown in the two concluding paragraphs; and the whole document cannot, we think, but carry conviction to the minds of the Legislature. Let it be only put to the lawyers in both Houses whether the honorary degree of D.C.L. ought to confer the right to practise as a barrister, and they must at once see the absurdities to which the omission of the proposed clause will lead.

In conclusion, we may echo the words of Mr. SPENCER WELLS, in proposing a vote of thanks to the Chairman: that, since all present seemed agreed as to the desirability of extending the representation of the profession, he trusted the President would not hesitate to call an early meeting of the Fellows and Members to discuss this very important matter. Mr. COCK'S time of office is just up, and the prospects of reform in the coming year will depend very much upon who the new President should prove to be. We, however, decline to trust in presidents, and hope shortly to be in a position to apply a more efficient motive power to the question of the election of the representative of the College in the General Medical Council.

THE Annual Report of the Poor-law Board, just issued, is one of special interest to the medical profession. The hard and repressive notions, the rigidly economic doctrines, which have hitherto been characteristic of the documents sent forth from Gwydyr House are evidently about to give place to the wider, more Christian, and, we venture to think, also more truly economical principles which we have been advocating for so many years. Mr. GOSCHEN is not only convinced himself, but he has, by his eloquence and by the force of truth, convinced both the House of Commons and

the country, that want of employment is not the main cause of pauperism nor of the increased expenditure from the poor-rates. For the first time we have an analysis of English pauperism as it really is. It is not the thing of which we need to be so desperately ashamed. In the whole country, in the depth of winter, at a time when many important industries were still suffering greatly from the depression which had so long prevailed, there were less than 34,000 really able-bodied men who were destitute from want of work; and if it had been possible to carry the analysis one step further, it would have been found that five out of six of those 34,000 were either too idle or too dishonest to secure a place. So that it may be inferred that there were not 5000 men in England who, in January last, were literally destitute from causes beyond their own control.

It is evident, then, that the main business of the guardians and the Poor-law Board is to minister to the requirements of sickness, imbecility, insanity, old age, and the dependence which follows upon desertion and death. And it is gratifying to observe that Mr. GOSCHEN is fully impressed with his important function. More than one-fourth of the whole present Report is taken up with the elucidation of questions relating to sickness and its treatment; and, by information extended over long periods and derived from the most trustworthy sources, we are provided with irrefragable proof of its important relation to pauperism, and of the necessity of providing for it promptly, adequately, and judiciously. We are told, for example, that the out-door sick paupers constitute 12·8 per cent. of the whole number of persons relieved; but as this only represents the actual sick, and not the families dependent on the sick, it gives but a faint idea of the relation of sickness to pauperism and expenditure. In the workhouses the information is more exact. In London, where the children are in district and separate schools, the proportion of sick inmates is greater than elsewhere. Indeed, generally speaking, there is more sickness in London than in the provinces. The percentage under the charge of the metropolitan workhouse medical officers varies from 32 to 48 per cent., according to the construction of the house and its adaptability to the treatment of disease. In the provinces the number of sick workhouse inmates is about 30 per cent It thus appears that at least 30 per cent. of in-door poor, and 13 per cent. of out-door poor, are actually on the sick-list; besides thousands who, though well, are, from age and infirmity, unfit to work. Add to this fact that 36 per cent. of paupers are children under sixteen years of age, and 4·2 per cent. are lunatics, and we have proof, if further proof were wanting, that the Poor Law is not the harsh, unfeeling system which deals only with the worthless and idle poor, as was supposed at the time of its reform in 1834; but a system of organised public charity, intended to protect the sick, the weak, and innocent from the horrors of destitution and impending death. Nor are we sorry to see that an effort has been made by Mr. GOSCHEN to reconcile the administration of legal relief and charity by a proposal that they should work in harmony together. There ought to be no reason why they should not do so. There can be no distinction as to the nature of relief. If it be necessary, it must be given; if unnecessary, absolutely refused. The charitable should not be permitted to give without discretion any more than the guardians; and although the former are not under legal control, it is necessary that public opinion should be rightly informed upon the point. Mr. GOSCHEN'S first attempt may not be successful to the extent of his desires, but we cordially agree with the Report that much valuable information has been elicited by the discussions which have taken place on the subject; and that the mere statement of the difficulties has not been the least useful part of the controversy.

We must leave a consideration of the subjects of special medical interest until a future opportunity; and we can only congratulate the public on the prospect of another public department emerging from the trammels of red tape, and from the dictation of officials who have too long persistently kept back the truth.

THE stupid and lamentable mismanagement which characterised the marches of the 9th and 94th Regiments has been the subject of general comment, and of no little animadversion. Mr. CARDWELL'S reply to the numerous questions put to him has not generally been regarded as a very successful one. The fatigue incidental to a march is much greater than is generally supposed. There is, however, no reason why our troops should not proceed from one station to another in this way. To march is quite as important a part of a soldier's duty as to fight; but we certainly have a right to expect that degree of forethought in the case of soldiers which a man with any pretension to common sense and humanity would exercise in the case of animals. A merciful man, requiring to tax the physical powers of his horse, would, during sultry weather, with the thermometer at 87°, take care to avoid exposure to a midday sun. He would provide that a proper supply of water was always to be had, and see that his horse was comfortably stabled and well looked after during the journey. These are points of such primary importance that they have only to be stated to be at once recognised. As far as we can glean, and we have reason to believe that our information is correct, the first great mistake, as it seems to us, occurred at Stratford, where the arrangements for billeting the men of the 9th Regiment were as bad and inconvenient as they well could be. The soldiers were scattered in all directions; some of them had to walk miles in order to appear at muster parade on the morning of the 22nd June, while the remainder had to wait for them. The time of starting was greatly delayed in consequence. The men subsequently started from Chelsea for Kingston in the very hottest part of the day, and the supply of water was inadequate at some of the halting places. It followed, almost as a matter of course, that the men felt the heat extremely, and one of their number died with all the symptoms of heat apoplexy in about five hours. The men of another portion of the same regiment, proceeding from Stratford to Aldershot by another route, enjoyed the luxury of ablution and refreshment at one of the Guards' barracks, halting afterwards in Hyde-park under the shadow of some trees; and they are said to have managed the march very well, although the time selected for performing it was, in our opinion, injudicious. So far for the 9th Regiment; and as

regards the 94th, it would seem that a death took place from pulmonary apoplexy in a soldier the subject of some organic disease.

The lesson to be learnt is a simple one, and may be comprised in a very few rules—viz.: 1. To start early, and, if the march be a long one, five o'clock is almost too late. 2. To supply a cup of good strong coffee, with a biscuit or some bread before marching, and to see that arrangements are made for allowing every man to perform his ablutions and obtain a good breakfast on arriving at the first halt. 3. To ascertain beforehand that there will be an ample supply of water for soldiers on the road, and, if not, to provide it; in any case a water carriage should be specially provided to accompany every body of troops on the march. 4. To have light, easy clothing, with the head protected, and the neck and chest free; to march at ease—not in close column, but split up into small bodies, as the Romans were in the habit of doing, so as to allow of the air being well dispersed and distributed amongst the men. Lastly, to avoid the least excess in alcoholic stimulants; and, in the case of soldiers, to see that the arrangements for their reception be such that they can enjoy a good night's rest to fit them for the morrow's march.

IN Mr. SYME there dies one of the compactest thinkers, and perhaps the best teacher of surgery, in the world. But he was far more than a great teacher. He was a great surgeon. He performed difficult operations with boldness and consummate success. There was a philosophy in all his surgery which raised it into the highest region of art. It was in this way that the surgery of Mr. SYME became so eminently curative, and its results could in general be so certainly predicted. His pupils will all remember the correspondence between what he said would happen in any case on first seeing it with them, and what did actually happen after the treatment he had decided to adopt. In other words, Mr. SYME's art was more than that of most surgeons—it was the application of a science. Mr. SYME was sometimes too ready to think that his own improvements had closed surgical science in that particular direction, as when he began a chapter on excision of joints in the supplement to his "Principles of Surgery" by the sentence: "More extended experience has confirmed my conviction that the shoulder and elbow joints are the only articulations which admit of excision with advantage for caries." The idea suggested by such a way of opening a chapter on a class of operations in which he had been so grandly successful, is that he was thinking, not only of what he had done, but of the impossibility of anyone else doing more in the same direction. Undoubtedly this was a fault in his character to which may be greatly attributed the opposition with which his proposals were apt at first to be received. But when one considers what splendid operations he either introduced or reintroduced, and with what brilliant success he performed them, one may easily forgive his fancying sometimes that nearly all had been done that could be done. And when we remember the acuteness and the accuracy of his own unaided observations, we can understand the light esteem in which he held auxiliaries that are very valuable to others.

As a teacher, Mr. SYME will not be forgotten while any of his pupils live, and as a surgeon he will be remembered as long as men need the art of surgery. Mr. SYME's excellence as a teacher consisted in the soundness and directness of his instruction. What he said was short, shrewd, and logical. Out of his profound botanical studies he remembered the rule of LINNÆUS, that no more than twelve words should ever be employed in describing the species of plants. He applied this rule to descriptions of disease, and characteristically added that "next to not observing the symptoms of disease at all, the greatest error a practitioner can commit is to collect them without reference to their relative importance as distinctive features of the case." His fame as a surgeon will be perpetuated by the utility of the operations which are inseparably associated with his name, especially the excision of the elbow-joint, by which alone he himself must have saved at least a hundred arms; the amputation of the ankle-joint, by which he himself must have saved at least fifty legs; the excisions of the upper jaw; perineal section; &c. &c. There was a conservative tendency in nearly all his surgery.

Up to the last few weeks Mr. SYME took a lively interest in everything affecting the honour and reputation of the profession. It is to him that we owe the beginning of the painstaking work of the Education Committee of the General Medical Council. He was greatly dissatisfied with the Medical Bill. We have ample justification for saying that he regarded it as quite unsatisfactory, especially since the omission of the 18th clause.

Mr. SYME's departure will be very deeply and very generally deplored. For the last fifty years he has been so constantly ready for either surgery or controversy, that men will everywhere feel duller and sadder for his death. Two or three years ago he had an attack of gout after a poisoned wound. But up to that time he had not been a day in bed for forty-six years. He has died as most great Scotchmen die—death beginning at the brain.

IT is well that the Fellows and Members of the College of Surgeons of England should clearly understand that Mr. CÆSAR HAWKINS's period of office as the representative of the Council of the College in the General Medical Council comes to an end on Tuesday next, and that the authorities of the College have summoned a special meeting of the Council on that day, although there is no special urgency, without waiting for the addition of two new members by the vote of the Fellows on the following Thursday, to elect—or probably to re-elect—*their* representative. We are almost weary of contending that the right of election rests with the corporation of Fellows and Members, and we only refer to the subject now to point out what an important precedent the President has set by summoning a meeting of the corporation on Tuesday last, *e proprio motu*. There is no definite power given to the President by any charter or bye-law of the College to call any meeting of the Fellows and Members, except for purposes of lectures, elections, &c.; and though we believe the President has the right he has

now exercised of calling a meeting for other business, it is an implied rather than a direct right. If the President, then, can call a meeting for one object, he can do so for another; and there is nothing to prevent his calling a meeting next week to elect by ballot a representative of the corporation in the General Medical Council. This is the best answer to those who have maintained that the right of election *must* rest in the Council because there is no machinery for any other mode of election. These gentlemen forget that representation in the General Medical Council was given long after the date of the charters and bye-laws; and the President himself has now solved the difficulty by showing how possible it is to call a meeting for matters not contemplated by either the charters or the bye-laws.

Medical Annotations.

"Ne quid nimis."

THE ELECTION AT THE COLLEGE OF SURGEONS.

THE election at the College of Surgeons happens to fall later in the month than usual, but we are not aware that this will materially affect the results of the contest. The number of candidates is double that of the vacancies; but there is this peculiarity, that there are no candidates for re-election this year, and that therefore there can be no pleas put forward on behalf of the "long-tried candidate," unless, indeed, the term is used in a somewhat different sense in reference to one of the candidates who goes to the poll for the fifth time. The views of Messrs. Wells, Lee, and Wilson, have long been before the electors, but Mr. Coote has not condescended to express any opinions for the guidance of the constituency, and must, therefore, not be surprised if its members decline to elect an entirely unknown gentleman as regards College matters, whatever may be the eminence of the school with which he is connected. We think it would have been in better taste had Mr. Coote deferred his candidature for a year or two, believing that rules which regulate the courts of city companies should apply equally to other, perhaps more important corporations.

Mr. Wilson is the senior candidate in every sense, having entered the lists in 1865, and presented himself to the electors in each succeeding year, with the exception of 1867. Mr. Wilson received the following votes in successive years,—24, 35, 108, and 125; but as, contrary to the practice of some elections, votes of unsuccessful candidates are not allowed to accumulate at the College of Surgeons, he has never gained a place higher than fifth on the list.

Mr. Spencer Wells and Mr. Henry Lee have both great surgical claims upon the votes of the electors. As one of the chief supporters of the now recognised operation of ovariotomy, Mr. Wells has, by his skill, done much to enhance the credit of British surgery; as a journalist he was broad and liberal in his views; and being unconnected with hospital cliques, he will be able to take an independent part at the College, where such men were never more wanted than at present.

Mr. Henry Lee, as a pathological and scientific inquirer, holds a position second to none in his own line. As surgeon to St. George's Hospital, he occupies a leading position among contemporary surgeons, and as a late president of the Metropolitan Branch of the British Medical Association, he has claims upon numerous surgeons in London and its vicinity, to say nothing of the liberality of the views he has put forward and is prepared to support.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

THE Society was chiefly occupied on Tuesday evening with a discussion upon the report of committee on the best way of restoring suspended animation. A paper by Dr. Barber, of Melbourne, was first read, on a successful operation for extroverted bladder in the female, and another paper by Dr. Hilton Fagge on the Anatomy of Molluscum Fibrosum. These were followed by the report, which had its origin in a paper read before the Society in 1868 by Dr. Bain, of Poplar, on Pacini's method of producing artificial respiration, and on a modification of it of his own. (See THE LANCET, Dec. 19th, 1868.) A committee was appointed to report upon these methods as compared with Silvester's, and their report was to the effect that Dr. Bain's method introduced more air into the chest than Silvester's. At the same time, they said that the methods were the same in principle, and that either of them introduced air enough; and they expressed no opinion about their relative advantages with regard to facility of performance, or other practical questions. In the discussion which followed, Dr. Bain insisted strongly upon the larger quantity of air introduced by his method, and maintained that the committee, admitting this, ought also to have recognised it as a point of pre-eminent practical importance. In the course of the debate a Hindoo physician, Baboo Chunder Roy, gave an account of Indian methods of restoring suspended animation; and, finally, the Society adopted the report of its committee, the President gracefully expressing a hope that Dr. Bain's dissatisfaction with the report would lead him to further practical research, and would induce him to contribute another paper upon the subject. The President then announced the close of the session, and dismissed the Fellows with a few valedictory observations, and with the expression of a hope that they would return to work in November with papers ready for perusal.

THE MIDWIFERY CHAIR IN EDINBURGH UNIVERSITY.

THE contest for the Professorship vacated by the death of Sir J. Y. Simpson will be decided on Monday next. The competitors have been reduced to three—to wit, Dr. James Matthews Duncan, Dr. Alexander Keiller, and Dr. Alexander Russell Simpson. The appointment rests with the Curators, who are seven in number. If practical experience as an operator and as a teacher be made the decisive test, Dr. Keiller's claims will prove very formidable indeed. He is older than his fellow-candidates. He has served full time and with much success as an Infirmary and Children's Hospital physician, and has acted as physician to the Maternity Hospital for twenty years. He has been a lecturer since 1849, and has delivered a special course on Midwifery since 1853. He has always attracted numerous classes—the surest test of professorial success. He is eminently practical, a neat and dexterous operator, and thoroughly qualified to undertake any operative interference. He is (a rare virtue in the medical circles of Edinburgh) on excellent terms with his professional brethren; and though he has had little leisure for literary pursuits, he has made about two hundred communications to medical societies and journals, and has invented or improved about nineteen instruments employed in obstetrical and surgical art. Dr. Matthews Duncan is a younger man. He, too, has been a Children's Hospital physician, and is now physician in the Infirmary, though he has not been physician to the

Maternity Hospital. As an operator, he is quite equal to all emergencies. In general culture, he has the advantage of Drs. Keiller and Simpson, and has not only written several works displaying considerable research and generalising power, but he has condensed into an independent form his miscellanies in the journals, and supplemented them where they appeared defective. In a word, he is the most academic candidate of the three. Dr. Simpson has never delivered a systematic course of lectures on Midwifery; but for some years he took his uncle's place in the class-room when Sir James was prevented from appearing in person; and he has had considerable experience as an obstetric physician in Glasgow. He inherits not only his uncle's very valuable museum in the University — an adjunct to her apparatus which his appointment would preserve for her—but he enjoys the benefit of Sir James's popularity with the representatives of the Town Council, who number four in the Court of Curators. If, therefore, these gentlemen are unanimous in his favour, he will be the successful candidate.

THE INDIAN MEDICAL SERVICE.

THE announcement that there will be no examination in August for the Indian Medical Service will be a grievous disappointment to many. The Indian authorities are perhaps little aware of the inconvenience, expense, and loss of time any change in an established system makes. For months many gentlemen are preparing for the competition, often giving up other appointments, and sometimes going to expense for special instruction. All this is done on the faith that a system which has now been in use for several years will not be lightly interrupted. The case is hard as regards the natives of these islands, but it is trebly so as regards the natives of India. There are at present in England several Hindoos who have given up appointments in India, and at great cost and personal trouble have come here to take the chance of the competition. We earnestly entreat the attention of the Duke of Argyle, whose fairness and consideration no one doubts, to the case of these gentlemen. Although medical graduates of the Indian Universities, they are compelled in England to pass the examinations of two medical corporations. They are put to the great expense, not only of the voyage, but of residence in England for several months; and are then examined in a language which, being really foreign to them, puts them at a disadvantage with Europeans. When to all these difficulties is added the fact that, without the least previous intimation, the examination for admission to the service, for which they had made these sacrifices, is suddenly postponed, we feel that the sense of right of our readers will be offended. These Hindoo gentlemen have, we feel certain, only to bring their case before the Secretary of State for India to obtain, if not a reversal of the decision not to hold an examination, yet some assurance that it will not be indefinitely postponed; and also, we should hope, some pecuniary indemnification for their enforced residence in this country.

THE CONTAGIOUS DISEASES ACTS.

THE outcry made by the opponents of the Contagious Diseases Acts against their "abuse," has just received a signal check and discomfiture. It has long been part of the stock in trade of some of these individuals to affirm at public meetings that respectable women are continually "outraged;" and on a recent occasion at Plymouth, Mr. Woollcombe, the chairman of the Royal Albert Hospital, challenged any gentleman to prove a single case in which the Act had been abused in the district. The challenge was, of course, noisily accepted; and persons were for some days at work, endeavouring to hunt up cases. The Acts have been in operation in Plymouth since December, 1863, and at last the platform champions found a case of alleged "abuse," stated to have occurred in October, 1869. Three referees were appointed with the consent of all parties; the necessary witnesses attended at a Plymouth hotel, on the 13th of June; and, after prolonged and careful hearing of the evidence adduced on both sides, the referees reported that no abuse of the Acts had been proved. They added that they had arrived at this conclusion "not without hesitation, and as strictly indicating a balance of opinion only, on a full review of the entire case." Now we do not profess quite to understand this sentence, but we guess it to mean that there was some colourable pretext for the charge, or some *primâ facie* ground for inquiry.

It appears, however, that a practical experience of nearly ten years furnishes no more than this. We should be glad to know of any new penal law which, in a large community, would be held to be discredited because once in the first ten years of its existence it had incurred suspicion of having been strained; the suspicion, after all, breaking down upon inquiry. We hope to be able to place before our readers, on a future occasion, some account of the facts of this particular case, which may possibly serve as a warning in other districts. It is scarcely to be hoped that the promoters of the agitation against the Acts will accept their defeat and "cease from troubling"; because to do so would be in direct antagonism to the first principles of their noxious trade. We can only hope that their unfounded statements and empty declamation will at last weary and disgust all respectable and sensible people; and that the progress of time may see the whole question removed from the domain of stump oratory, and of obscene or frenzied pamphlets, and restored to that of reason and science.

A PROPOSED NEW STREET.

WE trust that the public will be thoroughly alive to the importance of a proposed street reform in the Soho quarter of St. James's parish, which is in agitation at the present moment. Berwick-street, Soho, is doubtless well known to many of our London readers, but there are probably few who have ever penetrated further southwards than St. Luke's Church, of which the Rev. Harry Jones is the incumbent. Between the south end of Berwick-street and the top of Rupert-street, Haymarket, however, there lie a series of mean little courts, affording only a narrow passage for pedestrians, and a gossiping ground for all the blackguards of the neighbourhood. For years past the nuisance has been bitterly felt by the poor but respectable inhabitants of these courts, who have lately had to solicit extra protection from the police; and it is needless to say that to the respectable tradesmen of Berwick-street, and above all to the energetic vicar, the sight of such a moral pest and physical hindrance to traffic has been a perpetual eyesore. Seven years ago, Mr. Jones and some others made a vigorous attempt to induce the vestry of St. James's to purchase and sweep away the wretched tenements which alone prevent Berwick-street from being carried down in a direct line to Rupert-street, forming a carriage thoroughfare from Oxford-street to Coventry-street; but parochial apathy and vested interests were then too strong, and the project fell through. The effort is now renewed with far more prospect of success, for a fire has most conveniently destroyed three of the houses which would have to be removed to make the new street. The representatives of Crown property are strongly favourable to the scheme, and there are signs that the

vestry itself regards it with a feeling very different from that which it formerly displayed. We trust that all medical men who have the slightest chance of wielding influence in this matter will exert themselves to the utmost to secure the improvement which is so much needed. The parish of St. James's urgently requires the removal of a moral nuisance, and the physical benefits of an additional circulation of fresh air in the district and of improved lodging accommodation for artisans; while the whole London public should be interested in any plan that promises to relieve the present strangulation of carriage traffic between Oxford-street and the south.

THE MARSHALL HALL MEMORIAL.

THE subscription list is now closed; the sum collected amounting to £500. At a recent meeting of the executive committee it was suggested that the Royal Society would be the most desirable body into whose hands the administration of the memorial fund should be placed. But it was found that the Royal Society could not undertake the trust; and, failing this, a proposal was made that it should be committed to the Medico-Chirurgical Society, and this seems to have met with much approval. A public meeting of subscribers will shortly be convened to express an opinion upon the matter. Meanwhile we may observe that it is thought most desirable that a medal should be given with any award; that the awardee should be termed the Marshall Hall Scholar; and that the award, in money or otherwise, should be made for distinguished scientific labours, irrespective of membership of any body or nationality, some weight being given to necessitous pecuniary circumstances, and to such investigations as are of so purely a scientific interest as rather to involve sacrifices than any likelihood of direct advantage. The Universities of Edinburgh and of Durham, and the Epsom College, have been mentioned as fit and proper bodies to be specially associated with the memorial; but it seems to be generally thought that if a Royal Society of Medicine be formed, no more fitting body could be found, especially in its representative aspect, to carry out the wishes of the profession to do special honour to the memory of the great Marshall Hall.

THE STIMULANT QUESTION AND THE TAVISTOCK GUARDIANS.

SOME years ago the Tavistock Guardians wanted a medical officer, and they preferred Mr. Sleeman to Mr. Leamon, because Mr. Sleeman disapproved of stimulants. Lately Mr. Sleeman seems to have altered his views on this question, and to have prescribed wine, ale, and spirits for the sick paupers of the union. This change in the therapeutical views of Mr. Sleeman was most aggravating to the guardians, for had not they elected him on the understanding, if not the contract, that any stimulants he might order were not to be paid for by them? Accordingly they have withheld the cheque for his salary till they see whether the Poor-law Board will support them in deducting the cost of the stimulants from his cheque, and they have passed a unanimous resolution—

"That if the surgeon of the workhouse orders any stimulants in the shape of ale, porter, wine and spirituous liquors for the use of the inmates in future, that the master be directed to inform him that, as he has hitherto supplied all such stimulants since his appointment as medical officer, he be required to supply the same now, and that he will be held responsible for anything that may occur in consequence of his refusal to do so."

We have been loth to believe all the disparaging things said of boards of guardians. But the fact that a board can be found to elect an officer because he is likely not to use an important class of stimulants, and, when he does order them, to insist that he shall pay for them out of his own pocket, is reason enough for a change in the relation between boards of guardians and their medical officers. To subtract the cost of necessary stimulants in pauper cases from the scanty cheque of the Poor-law officer is a device of meanness which will make the Tavistock guardians badly conspicuous in the history of Poor-law medical reform.

UNIVERSITY OF LONDON.

AT the last meeting of the Convocation of the University of London, it was referred to the annual committee to consider in what way the new building may best be made available for the promotion of the principal objects of the University, and for associating more closely than has hitherto been possible the members of the University, with power to communicate with the Senate on the subject, and to adopt such measures as may be deemed desirable. A subcommittee was recently appointed, and they have agreed to a preliminary report in the form of a series of resolutions, which specify that the room in the University building for the use of graduates shall be designated Convocation room; that it be open to all members of Convocation, to all graduates not of Convocation standing, and to the Senate, examiners, and registrars; that it is desirable that the Senate should apply to Government for an order authorising the Registrar to place the Convocation fees in the hands of Convocation, to be applied to the purposes of the room, so that it may be supplied with various papers; and, lastly, that it is desirable that one morning in the week during part of the year be set apart for social meetings in the Convocation room.

THE ABERDEEN INFIRMARY.

OWING to the resignation of Dr. Keith, of world-wide reputation as a lithotomist, there is a vacancy for a surgeon to the Aberdeen Infirmary, and, as might be expected, there is a sharp contest for the post. The most prominent among the candidates is, undoubtedly, Dr. Alexander Vans Best, late of the Indian Army, who was a distinguished pupil of the Aberdeen School, and in 1857 gained the second place in the Indian Army competition—no mean test of a man's abilities. Dr. Best has served with the greatest distinction in India and China, and was for many years in charge of hospitals; he is a Doctor of Medicine, and a Fellow of the College of Surgeons of England by examination. The other candidates are gentlemen of promise, whose qualifications and experience do not date five years back, but who have the advantages of considerable local interest and personal friendship on the part of the managers. We trust that, in the interests of the charity, merit alone will carry the day, and that the Aberdonians will be too chary of the reputation of their school to elect any but a first-rate man.

DR. ROGERS.

IT is impossible to note the second reading of the Bill for giving superannuation allowances to union medical officers, without calling the attention of our readers to the large share which Dr. Rogers has had in securing its passage through the House of Commons. Upon his shoulders the mantle of Mr. Griffin has fallen worthily; and he has had the privilege not only of seeing the fruition of some of the good seed sown by his predecessor, but of himself rendering great assistance, by his tact, his courage, and his indomitable energy, in promoting the recognition by Parliament of the claims of the Poor-law surgeons. We are rather opposed to testimonials; and Dr. Rogers's work has been of too high a class to be properly rewarded by the kind of reward that comes to popular preachers or the

promoters of successful companies. But we would suggest one way in which it might be appropriately recognised. Some years ago, a distinguished member of the House of Commons greatly exerted himself to bring about certain reforms in matters affecting the Church. Clergymen who appreciated his labours wrote to him to express their appreciation. He preserved and bound their communications, with the result that he now possesses handsome volumes containing letters from no less than two thousand clergymen, who have found his labours of benefit to themselves, to their class, or to the people under their charge. The example is one that might be followed in our own profession; and Dr. Rogers might well be put in a position to form a volume that would be itself almost without parallel, and that would be a cherished possession for his descendants.

THE ROYAL COLLEGE OF SURGEONS IN IRELAND.

A MEETING of the Fellows of this College, convened by the Council, was held on Saturday, June 25th, for the purpose of considering the position of the College with reference to the new Medical Bill before the House of Lords. The ex-President, Mr. Macnamara, at the request of the President, made a statement explanatory of the provisions of the Bill, dwelling forcibly upon the injurious effect to the profession and the public at large of Clause 18 of the Bill as it now stands, as by it the medical corporations are deprived of their long established privilege of conferring the title of licentiate.

A petition was afterwards adopted by the meeting for presentation by Mr. Brady, M.P., to the House of Commons, and by Lord Talbot de Malahide to the House of Lords.

HOSPITAL CHANGES.

WE understand that the next few weeks will witness a move in the surgical staff of Guy's Hospital, Mr. Hilton being about to retire on attaining the age of sixty-five. Sixty was the age fixed for retirement at Guy's some years since, but this law does not affect the two senior members of the surgical staff. Mr. Cock, though senior to Mr. Hilton at the hospital, is junior to him by nearly a year at the College of Surgeons, and presumably therefore in age, but his retirement will probably not be long delayed. Mr. Hancock is about to quit the Westminster Ophthalmic Hospital for similar reasons, but the surgeoncy at Charing-cross Hospital is, we understand, not regulated by any provision respecting age. At St. Thomas's Hospital the next two or three years will witness the retirement of the two senior surgeons, and as Mr. Solly naively remarked at the recent festival dinner, "the reputation of the new hospital will depend upon the character of the men who shall be elected to succeed the talented surgeons who are about to retire, though it will be very difficult to find men at all equal to them"!

LANDOWNERS AND SEWAGE IRRIGATION.

Is it possible that those landlords who are spending so many thousands in opposing sewage irrigation at Reading and Blackburn before the Committee of the House of Lords, really know what wiseacres they are? Do they know that at this moment almost the only really green spots in England are sewage farms? Do they know that finer grown and finer flavoured fruits and vegetables are not to be found anywhere than those which may now be plucked upon land which only a year or two ago was a worthless sandy waste? Do they know that the exact strength of sewage has been so well ascertained that the sewage farmer has been able to feed the young cabbages with weak sewage, and the older ones with stronger, treating them exactly like children, with food they can digest? Do they know that the outside leaves of these cabbages are more tender and more nutritious than the hearts of those plants which are grown on common land,—that the rhubarb grown there has no tough skin, and that both it and the beet-root have more sugar than is to be found in their juice elsewhere,—and that strawberries grown on sewage scientifically applied are of the very finest flavour? Have they reflected that the annual produce of the Craigentinny meadows is equal in value to the fee simple of any average land? We fancy not, or such an acute man of business as Mr. Attenborough, the pawnbroker, would not be quarrelling with the people of Reading, who want to buy his land for sewage irrigation. Why, otherwise, instead of opposing them, does he not say to the ratepayers of Reading, Give me your sewage, and I will save you all expense. My land is convenient for its application; bring it to me, for science tells us that every grain of ammonia represents a farthing—a farthing which we will divide between us.

THE LATE LORD CLARENDON.

THE immediate cause of this distinguished statesman's death was diarrhœa, which continued for several days before he was seen by his usual attendant, Dr. Baber. His Lordship could not be prevailed upon to give up his official duties, insomuch that when, on the evening of Saturday, the 25th ult., Dr. C. J. B. Williams was summoned in consultation, he was found, though very weak, still sitting up in bed, with several despatch boxes before him. At 4 P.M. on Sunday, the treatment had proved so beneficial that Dr. Gull, who then joined in consultation, entertained good hopes of his recovery. At midnight, however, Dr. Williams was summoned, and found his Lordship in a sinking state, from which the free administration of stimulants failed to rouse him, till death supervened soon after six in the morning. Lord Clarendon had suffered for many years from gout, occurring internally and at the joints, in periodical paroxysms. The action of the heart was feeble, and the pulse slow. He retained consciousness till within three hours of his decease.

MR. CHILDERS.

IN spite of the conflicting and exaggerated statements that have been promulgated as to the condition of Mr. Childers's health, we are glad to be enabled to state that since his removal to Bedwell-park, near Hatfield, where he is at present staying, he has been daily gaining in health and strength. He is evidently benefited by the change of air and rest from his arduous duties, and the favourable nature of the symptoms of the affection under which he is suffering renders it highly probable that his cure may be regarded as only a question of time and patience; indeed, to speak still more definitely, we have every reason to hope that he will be able to resume work in about a fortnight or three weeks.

THE A. B. C. PROCESS AT HASTINGS.

ON Wednesday the directors of the Hastings Sewage Manure Company invited a number of gentlemen connected with the press to inspect their new works for the manufacture of artificial guano by the A. B. C. process. The works are situated at the eastern extremity of the town, and appear to be admirably adapted to the purpose for which they were designed. The quantity of sewage is said to average 1,600,000 gallons per day, and the product to be between five and six tons of manure, the estimated value of which is £5 per ton. We are not yet in a position to express any opinion as to the commercial prospects of the

company, as the works have only just been started; and as regards the result upon the sewage in a sanitary point of view, it may perhaps be doubted whether the directors of the A. B. C. Company would themselves propose that the Hastings operations should be considered a fair test, seeing that the subsidence tanks are by no means so extensive as they should be to secure perfect purification. We must suppose, however, that the abstraction of so large a quantity of solid matter must have an appreciable and important effect.

UNSUSPECTED SOURCES OF INFECTION.

Now that infectious diseases are somewhat prevalent it is worth while to notice some of the unsuspected channels by which infection may be conveyed. Woollen goods, from their peculiar texture, are very liable to catch and retain organic particles floating in the atmosphere of a close, ill-ventilated room. Much of the work performed by tailors is done elsewhere than at the shops where the cloth is purchased and cut out for garments, and it is not at all unlikely that it finds its way to some close little room in a dirty court. A city surgeon assures us that he has often seen the best work being made up in the same room where cases of scarlatina, measles, &c., are present. Such diseases may be propagated also by means of linen washed and got up by laundresses living in crowded courts and alleys, where the proper conveniences for washing and drying do not exist. It is said to be a practice common among domestic servants who are allowed "washing money" to send their things where they can be done at a cheap rate. They are, therefore, often only imperfectly scoured, and afterwards hung up to dry in rooms occupied by families; and clean linen may in this way introduce into a household something less appreciable to the senses, but far more dangerous, than what is euphemistically termed a "Norfolk Howard."

THE COMMONS AND THE PUBLIC.

WE are glad to learn that the claim which Lord Spencer has set up to the ownership of all that remains unenclosed of Wandsworth Common is in a fair way of being decided by the Law Courts. We regard the question as one involving considerations of a sanitary and moral nature. It is every day becoming more and more a matter of necessity that the inhabitants of our cities should have some means open to them for enjoying healthful exercises in the open air. The deteriorating influences of a city atmosphere on the population, although insidious in their progress, cannot be doubted; and the effect of compelling artisans and the poorer classes to spend their holidays in the towns where they are employed cannot fail to be injurious to them in several respects.

THE BILL AND MEDICAL MEN WITH ONE QUALIFICATION.

A CORRESPONDENT, an M.R.C.S., thinks that men with one qualification have been entirely overlooked in the Bill, and proposes that the Bill should be so far retrospective as to include men qualified to be registered in virtue of one diploma, and enable them to register under the new Act as general practitioners. Our correspondent is wrong in thinking that such cases as his have been entirely overlooked. Clause 24 has been inserted in their interest. It is as follows:—

"Where a person has obtained, before the passing of this Act, a qualification to practise in medicine or surgery, or in some branch of medicine or in some branch of surgery, and not in all the branches of medicine and surgery, such person may be admitted to the examinations under this Act on such special terms as may be provided in that behalf by any examination rules under this Act."

This clause, though not going as far as our correspondent would wish, will make it easy for those who are only partially qualified to complete their qualification. They will continue, of course, in any case to be registerable as now under the principal Act (of 1858). More than this could scarcely be expected. Our correspondent's suggestion would be tantamount to conferring a diploma, without examination, upon all persons with only one qualification. While we cannot see the propriety of this, we would urge that the examination should be restricted to subjects in which they have not been examined, and that the fee should be small.

VACCINATION.

As a means of roughly expressing an estimate of the efficacy of vaccination, it is often asserted, and with truth, that it is as protective against small-pox as a previous attack of that disease is against the recurrence of it. The practice of inoculation for small-pox was, as everyone knows, superseded by that of vaccination; and we are not without the means of estimating the relative value of the two. Since the opening of the Royal Military Asylum in 1803, up to December, 1851, 1950 boys were recorded as having marks of small-pox, and 3824 marks of vaccination. Out of 39 attacked with small-pox, 12 already bore the marks of that disease, and 27 those of vaccination. Only four deaths occurred, and it is remarkable that these were all from secondary small-pox, not one having occurred among the vaccinated. Our readers may refer to the official report of the General Board of Health on Vaccination in 1857 for a more detailed statement of the facts connected with the Royal Military Asylum; but the above information will be interesting to many at the present time.

BABY-FARMING.

THREE out of the eleven children removed from the Brixton baby-farm to the Lambeth Workhouse have succumbed to their hard destiny, fading quickly out of an existence begun under auspices so unpromising. It is an immense satisfaction to know that the Government have undertaken the prosecution of the two baby-farmers; and it may be hoped that such action is but the prelude to further measures in repression of this traffic in human life. Two inquiries are proceeding in the Brixton case, one before the Surrey coroner, and the other at the Lambeth Police-court, and both of them will probably be of a prolonged character. Dr. Puckle, who visited the "farm" with the police, was struck by the drowsy state of the children, which he attributed to the administration of narcotics; and post-mortem examination of the dead infants showed the cause of death to be atrophy, with congestion of the brain. It is hoped that the publicity which this case is receiving will lead to further information being furnished to the police, so that, in all important particulars, the exposure of what "baby-farming" implies may be complete.

MEMBERS of the Clinical Society will be glad to hear that arrangements have been made by which their meetings will, in future, be held in the rooms of the Royal Medical and Chirurgical Society, 53, Berners-street.

DR. FRANKLAND, in his report on the quality of the London water supply during June, refers to the efficacy of the late Dr. Clark's process for softening hard water, and the Registrar-General is thereupon led to ask why this process should not be applied to the whole of the London supply. We suppose the answer is not far to seek. It is simply a question of £ s. d.

A general session of the St. Andrews Medical Graduates' Association will be held on Thursday, July 7th, at the Castle Hotel, Windsor, for the election of new members and other business. Arrangements have been made to enable the members to visit the castle and other objects of interest, and in the evening the members will dine together.

A handsome silver claret jug and salver were presented to Mr. Holman, of Hurstpierpoint, on Tuesday, by the chairman of the Board of Guardians of the Cuckfield Union, on behalf of the members of the board and those interested in the welfare of the poor. Mr. Holman has resigned the care of the poor of District No. 4 of the Cuckfield Union, whom he has attended for more than fifty years.

Diarrhœa is increasing in fatality in London; the deaths last week caused by it were 86, to which number they have gradually risen from 22 in the first week of June.

Bills for the utilisation of the sewage of the towns of Blackburn and Reading, empowering the corporations to purchase large tracts of land for irrigation, have passed the ordeal of committee in both Houses of Parliament.

The *Pall Mall Gazette* is authorised to state that there is no truth in the assertion which has been made in some quarters that the Hebdomadal Council at Oxford blackballed Professors Tyndall and Huxley for the honorary degree of D.C.L.

At the approaching election for Dublin the *Freeman's Journal* asserts that Sir Dominic Corrigan will be an eligible candidate.

The Medical Officers' Superannuation Bill was read a third time and passed in the House of Commons on Wednesday.

THE COLLEGE OF SURGEONS AND THE MEDICAL BILL.

A meeting of the Fellows and Members of the Royal College of Surgeons was held on Tuesday last, to discuss the advisability of petitioning Parliament in favour of the restoration of the original Clause 18 to the Medical Act Amendment Bill. The President, Mr. Edward Cock, was in the chair.

In opening the proceedings, the President stated that he was himself responsible for convening the meeting, but he was sanctioned in the course he had taken by the two Vice-presidents of the College. It appeared to them to be so important that the opinion of the Fellows and Members of the College should be sent at once to the House of Lords that they did not take the usual step of consulting and receiving the sanction of the Council. The Bill was no longer that which they had previously discussed, for the 18th clause, enacting that the only portal to the profession should be through the examination of a conjoint board, and that no honours or degrees should be conferred until that portal was passed, had been abrogated. They considered that that abrogation really emasculated the Bill, and they therefore thought it right to summon the Fellows and Members of the College, in order that the subject might be fully considered.

Mr. Busk proposed, "That this meeting fully agrees with the opinion expressed in the resolution of the Council of the College on the 9th instant—namely, that the original Clause 18 of the Medical Act (1858) Amendment Bill should be reinserted in the Bill, and that a petition in the name of the Fellows and Members of this College, as represented by this meeting, be drawn up and presented to the House of Lords, praying that, for the reasons stated therein, the original Clause 18 may be restored to the Bill." It was clear, he said, that the abrogation of Clause 18, instead of rendering the admission into the profession more simple and uniform than at present, would have the opposite effect; and that, instead of nineteen portals to the profession, there would in future be twenty-two. The alteration was said to be a concession to the universities, but it was a well-known fact that scarcely any practitioner of medicine gained admission through the portals of the universities. As far as England was concerned, the profession at large consisted of members of the Colleges of Surgeons and Physicians and of the Apothecaries' Company. Virtually, it might be said that, up to the present time, there was only one uniform portal for admission into the profession in England, and therefore a Bill like the present was, in fact, unnecessary for England; but it was very different with regard to the sister kingdoms, where there was a multiplicity of examining bodies, and where the universities occupied a very important position as regards the admission of members into the profession. Under the present Bill, with the omission of Clause 18, all the universities in the kingdom were placed in one category, which in itself was quite a mistake. He had the strongest possible conviction that it would be far better that no Bill should be carried than that Clause 18 should be omitted. There were two other points in the Bill which required even more serious attention, but they could not then be discussed. One of these was the disproportionate representation of the medical corporations in the General Medical Council. But he would simply confine himself to proposing the resolution.

Mr. Partridge, in seconding the resolution, expressed his general concurrence in the remarks of Mr. Busk.

Mr. Gamgee thanked the President for convening the meeting. There could be no doubt, he said, that, in the opinion of the majority of the profession, Clause 18 was the most important feature of the Bill. With regard to the question of representation in the Medical Council, the vast bulk of the profession was undeniably not represented at all.

Mr. Adams complained of the unsatisfactory condition in which the profession was placed, and said that the idea of learning the profession at a university by means of books and lectures alone was an obvious absurdity. He also suggested that the authorities of the College should prepare a Bill, and submit it to the Legislature for adoption.

Mr. Heckstall Smith said that nothing had given him so much surprise as the omission of Clause 18, which was the very essence of the Bill. If it was abandoned, they had better forego legislation for the present. It would be worth any amount of exertion and thought to get the clause reinserted, and he hoped that the Fellows and Members of the College would go with such force to the Government as to render it impossible that the clause should be omitted. Instead of the evil of which they had so long complained being remedied, the proposed Bill, without Clause 18, would in reality increase it. The Bill was intended mainly for the protection of the public, and yet it was now proposed to admit into the profession men who had not been sufficiently tested in their knowledge of it. He knew not in what light to regard the proposal, except as a simple job in favour of certain universities. If they were to have any Bill at all, let them have a Bill which would protect the public against ignorance, and prevent the admission of shoals of men who were not fitted to practise. He trusted that the Council of the College would give their strongest support to the restoration of Clause 18, and thus put a crown to their exertions of late years. Much as the members had had reason to complain of them in times past, there could be no doubt that they had of late been marching with the times. (Hear.)

Mr. Rogers Harrison congratulated the authorities of the College on the step they had taken in summoning the meeting, and expressed his concurrence with the resolution.

Mr. Christopher Heath said he was glad to hear Mr. Busk express an opinion that the corporations were inadequately represented on the Medical Council. It appeared to him somewhat strange that a member of the Council should express that opinion when, on Tuesday next, the Council would proceed to elect a representative of the College for the next five years. He protested that the election would be a usurpation of the rights and privileges of the fellows and members. If Mr. Busk meant that the Col-

lege of Surgeons ought to have more representatives than the University of Durham, he entirely agreed with him.

Mr. GANT said that the resolution, if it passed in the form proposed, might lead to the supposition that, on the restoration of Clause 18, the Fellows and Members of the College would be perfectly satisfied with the Bill. He suggested an addition to the resolution, stating that no Bill would satisfy the just claims of the Fellows and Members of the College which did not distinctly provide for their direct representation in the Medical Council.

The PRESIDENT said that the meeting had been summoned for one purpose only, and though he had been pleased to hear the speakers allude to other matters, he did not think it was competent to the meeting to pass resolutions in reference to any other subject than that which it had been specially convened to consider.

Mr. J. F. CLARKE said that Clause 18 was the fundamental point of the Bill, and its omission would be most disastrous. If the Bill passed without it the result would be like playing a game with loaded dice. If they could carry their point with regard to Clause 18, they would thereby show their power in the House, and secure other advantages of a most important character.

Mr. BUSK said that, in speaking of the representation of the College on the Council, he intended to make no reference to the mode in which the representatives should be elected. He entirely differed from Mr. Heath in his view of the matter, and thought that the scheme for electing representatives in the Council from the general body of the profession was utterly preposterous and impossible of execution. (No, no.) He was also of opinion that an immense deal of mischief had been done by the apparent antagonism of a certain part of the profession towards the Council and the College. (Question.)

Mr. COOPER expressed his hearty concurrence in the resolution proposed by Mr. Busk.

Mr. JAMES, after thanking the President and the authorities of the Council for the steps they had taken, proposed as an amendment, "That, while returning thanks to the President of the Council for petitioning the House for the restoration of Clause 18, this meeting is of opinion that even the restoration of the clause would not satisfy the profession, and that no Bill would be of any use which does not provide for the representation of the profession in the General Medical Council, and for one single examination entrance into the profession."

Mr. GANT seconded the amendment, but subsequently stated that, desiring to have a unanimous expression of opinion with reference to Clause 18, he would recommend the withdrawal of the amendment.

The resolution then passed unanimously.

Mr. JAMES expressed a hope that the Council would take the other matters into consideration, and give the fellows and members an early opportunity of discussing them within the walls of the College.

A petition to the House of Lords, praying for the restoration of Clause 18, and specifying the reasons for such restoration, was then read and agreed to.

The PRESIDENT said he hoped that the Members and Fellows would bring to bear all the influence they possessed on the members of the Legislature before the passing of the Bill.

On the motion of Mr. SPENCER WELLS, seconded by Mr. GAMGEE, a vote of thanks was unanimously accorded to the President, and the proceedings terminated.

POOR-LAW MEDICAL OFFICERS' ASSOCIATION.

THE annual meeting of this large and important Association will be held at the Freemasons' Tavern, Great Queen-street, Lincoln's-inn-fields, on Wednesday, July 13th, at 5 P.M. The necessary routine business being completed, the President will deliver his inaugural address, which, as on previous occasions, will probably be of much interest. As very considerable success has attended the spirited and energetic public action which this Association has taken (of which the recent interesting debate and division in the House of Commons on the Superannuation Bill form signal proof), it is earnestly hoped that Poor-law medical officers generally will make an effort to attend the meeting. We trust that members of the profession not connected with the Poor-law service will strengthen the meeting with their presence, and thereby aid the President and Council in their desire to treat with becoming consideration and respect those members of the Legislature who have signified their intention to attend and dine with the Association.

Gentlemen who intend to be present are requested to apply to J. Norton, Esq., 38, John-street, Bedford-row, or Benson Baker, Esq., 42, Grove-road, Regent's-park, Honorary Secretaries of the Dinner Committee, on or before Saturday, July 9th.

SIR JAMES Y. SIMPSON AND HOSPITALS FOR WOMEN.

To the Editor of THE LANCET.

SIR,—Having for twenty-eight years enjoyed the privilege of the late Sir James Y. Simpson's friendship, I well know his opinion in reference to the resolution proposed by Lord Dalhousie, and seconded by Mr. Dempster at the meeting held at Stafford House last Thursday.

From one of his letters in my possession—an extract from which follows—I am able to confirm Lord Dalhousie's statement, "That no commemoration of a man so eminently practical would be complete which did not embrace the establishment of a hospital where the diseases peculiar to females could be treated, which every friend of the late Sir James Y. Simpson knows was an object very near his heart."

Extract from a letter addressed to my colleague, the late Dr. Rigby.

"I am delighted to hear that you are proposing to establish an hospital for female complaints exclusively. There certainly should be such an hospital in every large city. See what an immensity of good has been conferred upon humanity and upon medical science by the institution of separate wards for female ailments in the great Dublin Lying-in Hospital. If I had seen any prospect of success I would, ere this, have attempted to get a ward or two set apart for these diseases in the Edinburgh Hospital. Here we lack not the will, but the means. Local female diseases are so little studied by the general physician and surgeon that they admit them with hesitation into their hospital wards—take no sufficient interest in the cases when forced under their care—and, for the most part, have really given little or no attention to the peculiarities of diagnosis and treatment which such maladies require. No man doubts the propriety of separate hospitals and dispensaries for diseases of the eye. Every argument that could be adduced in favour of such separate institutions for the diseases of the eye might, with equal truth and propriety, be adduced in favour of separate wards and institutions for the diseases of the uterus. I often see cases where a little hospital care and treatment would set the patient perfectly well, and restore her again to health and happiness; but where, from the want of a proper institution, she is obliged to linger on in wretchedness and misery. Our present hospitals, in fact, only admit uterine ailments *after* they have become highly exaggerated and are probably beyond the reach of medical or surgical treatment. What is to be wished for is an institution where such cases could be admitted and treated *before* they had reached such a stage. We have nowhere, I believe, in the United Kingdom such an hospital except the one in Dublin, which I have already alluded to. I heartily wish you every success in trying to establish an institution of this kind in London.

* * * *

"Believe me, with every respect, yours very faithfully,
(Signed) "J. Y. SIMPSON.
"22, Albany-street, Edinburgh, 22nd September, 1842."

Since the date of this letter I have on several occasions conversed with Sir James on the subject of the Hospital for Women which was established in that year in London. The last time of doing so was in Dublin, at the annual meeting of the British Medical Association, in 1867. He then remarked that the Hospital for Women might claim exception to the objections raised against general hospitals on the plea that only non-contagious diseases were admitted into its wards. And he at the same time agreed with me that

advantages must also accrue from the facility which the Hospital for Women offered to the student for classifying the diseases peculiar to women. Sir James Simpson on several occasions visited the Hospital for Women, and performed operations there.

On these grounds I beg most earnestly to support the adoption of the resolution of the Provisional Committee, held in Edinburgh on Friday last.

"The Committee are unanimously of opinion that the first object to be aimed at should be a suitable monument, including a statue, to be erected in a conspicuous situation in Edinburgh. Further, bearing in mind the great work which Sir James Simpson accomplished in the improvement of the treatment of a particular class of diseases, they are of opinion that the sum aimed at should be sufficient not only for the erection of such a monument, but also for the establishment of an institution for the treatment of the diseases of women and children, open to sufferers from any quarter."

I trust, therefore, that the recommendation to abandon the proposition for a memorial hospital ("on the ground that the opinion of Sir James Y. Simpson was persistently opposed to the establishment of special hospitals for the treatment of diseases peculiar to women") will not prevent its adoption. It is a proposal which of all others is best calculated to further the objects to which his life was so unceasingly devoted, and with such unrivalled success—viz., the study and the treatment of the diseases of women.

I remain, Sir, your obedient servant,

PROTHEROE SMITH.

Park-street, Grosvenor-square, June 27th, 1870.

PARIS.

(FROM OUR OWN CORRESPONDENT.)

THE EPIDEMIC OF SMALL-POX.

THE small-pox epidemic does not show signs of decline, and the number of deaths for the week ending June 25th has been, strange to say, exactly the same as in the preceding week—namely, 238. The Vaccinal Congress, wherein the rare detractors of vaccine were so heavily beaten by the mass of the assembly, has had the good effect of increasing largely the number of persons who present themselves to be revaccinated either at the *mairies* or at the hospitals. On the other hand, the authorities have been taking measures to diminish the risk of contamination during the illness or after the death of variolic patients by allowing the burial to take place after a shorter lapse of time, &c. How far these measures will tend to arrest the progress of the pestilence will be shown by time; but probably the epidemic, which undoubtedly had been favoured by existing circumstances, must "vent its spleen," and will only decline and die out *qu'après avoir donné tout ce qu'elle avait à donner*—the causes of its banishment being as little known as those of its eruption. Everybody in Paris, medical or non-medical, seems to be struck with utter surprise at the speedy and extensive development of a disease which has caused as many as 5000 deaths since the beginning of the year, and which, according to common belief, had been driven away, with the black death and other plagues of the middle ages, by Jenner's invention, never to return. The present epidemic will have had the good effect of rousing the Parisian population from the state of calm indifference wherein they were plunged with regard to vaccination. Certainly the lesson will be a very severe one; but the French, perhaps, needed it, in order to be awakened to the necessity of adopting a general and compulsory system of vaccination, like the one which has already been enforced in Great Britain (without the need of any such extraordinary stimulant) and which, until now, had been much criticised here. *En attendant* the authorities have become at least aware of the urgency of practising vaccination and revaccination on an extensive scale, and of having on hand a stock of good vaccinal virus. A spirit of prudence and foresight has been engendered, and as the epidemic seems destined to proceed northwards, proper measures of precaution are urgently recommended to be at once taken in what seems the probable itinerary of the pestilence—namely, the north of France.

ACADEMICAL ELECTIONS.

At the last meeting of the Academy of Medicine, M. Payen, already a member of the Academy of Sciences and the author of several remarkable scientific productions, was elected an *associé libre*, or honorary fellow, of the society; the other candidates being M. Théophile Roussel and M. Brochin, the talented editor of the *Gazette des Hôpitaux*.

The Academy of Sciences has also proceeded to fill up two vacant seats among the foreign associates, or correspondents. One of the seats was in the section of medicine and surgery, and was given to Rokitansky. Among the names which had been brought forward for election by the committee were those of Paget and Bowman, if I am not mistaken. The other seat belonged to the section of physiology, and I am glad to say that Mr. Joule, of Manchester, was elected to it on the very first vote. The other names presented were those of Angström, of Upsaal; Jacobi, of St. Petersburg; Dove and Riess, of Berlin; Grove and Tyndall, of London; W. Thomson, of Glasgow; Lloyd, of Dublin; G. Stokes, of Cambridge; Henry, of Philadelphia; Volpicelli, of Rome; and Billet, of Dijon.

CLUB OF THE MEDICAL STUDENTS.

The medical students of Paris are busy organising a club in which they will be able to meet and discuss all questions of scientific or professional interest. The idea of this club arose amidst the agitation which has lately been carried on in respect of the "free" teaching of medicine. Of course the club will not be merely a *lieu de réunion* for debating purposes, but will be made to contain as many general comforts and conveniences as possible. I have been told by one of the chief promoters of the scheme that their success has been unexpected, and that the club will soon be in full operation.

HEALTH OF THE EMPEROR.

The latest accounts from the imperial residence of St. Cloud mention that the Emperor is still in good general health, and only suffers, as I informed you, from a localised attack of gout in the feet. He still walks with difficulty, but all the functions are unimpaired, and his Majesty can give his entire attention to the business of the State. Nevertheless, projects of a voyage to Vichy or Contrexeville are entertained.

Paris, June 27th, 1870.

THE MEDICAL BILL IN THE HOUSE OF LORDS.

ON Thursday evening the Bill, as amended on report, passed, as might have been expected, with very little alteration, through Committee in the House of Lords. Before the hour there was a considerable gathering in the lobbies of medical men from all parts of the kingdom, representing interests which might be supposed to be involved. The Duke of Richmond withdrew his principal amendments, on which we commented last week, observing that they had much more extensive bearings than he thought they had when he drew them up. On Clause 14 (of the Bill as amended) Lord De Grey said that while he could not see his way clear to one board for the whole kingdom, there was considerable force in the objection that had been made that, as the clause stood, the licences would be invidiously distinguished according to the particular board passed. He, therefore, —at least so we understood him—would agree that the licence should bear the authority of the General Medical Council and not that of the particular local board. Clause 19 concerning the erasing of names from the Register was commented on by Lord Salisbury. He thought the power given to the Council of erasing a name on account of "infamous or disgraceful conduct in any professional respect" was severe. But Lord De Grey pointed out that it was not different from the power given in previous Acts; and the clause passed. Some discussion arose on Lord Cairns's amendment—on which also we commented last week—making an exception in favour of those universities which require a degree in Arts previous to granting a degree in

medicine, which, he said, was the case of Cambridge, Oxford, and Dublin. Lord Powis and others showed that this was not strictly true of Cambridge;—that though a certain progress in Arts was required, graduation in Arts was not required in Cambridge. Lord De Grey did not see how he could consent to Lord Cairns's proposal. On a division, the amendment was lost. The Lord President intimated rather inaudibly some changes in the form of Clause 20, in favour of those holding foreign degrees, over forty years of age, and having been ten years in practice. Finally, Lord Lichfield drew attention to the petition from the British Medical Association in favour of direct representation. He said that a memorial signed by nearly 10,000 practitioners had been presented on this subject to the Lord President, and that any amendment of the Bill which did not yield this point would be unacceptable to the profession. He intimated that he would formulate an amendment on the subject, and, at the next stage of the Bill, take the opinion of the House upon it. Clause 18 of the original Bill, which the profession thinks so essential, was not mentioned in the course of the debate.

Obituary.

JAMES SYME, Esq.

ANOTHER distinguished pillar of the great medical school at Edinburgh has fallen, in the person of James Syme, Esq., for thirty-six years Professor of Clinical Surgery in the University, and celebrated all the world over as one of the best operators and teachers of his time. He came of a respectable middle-class family in Fifeshire, the native county of many famous Scotchmen, such as Dr. Chalmers and the brothers Goodsir, and was born at Edinburgh in 1799. Unlike the majority of his professional brethren, he enjoyed a thorough preliminary training before he entered on the study of medicine, having passed through the High School of Edinburgh and the Arts curriculum of the University at perhaps its most brilliant period, when classics were ably taught by Pillans and Dunbar; and mathematics, natural philosophy, and ethics were severally represented by men whose names are now historical—Sir John Leslie, John Playfair, and Dr. Thomas Brown. Young Syme, we believe, had some inclination, as he had much of the family capability, for legal pursuits; but, with characteristic judgment and decision, he set aside the temptation of following a profession in which several of his own kinsmen had already attained to eminence and influence, and devoted himself to medicine, for which nature had especially marked him out. In his nineteenth year, accordingly, he commenced the study of anatomy under Robert Liston, then rising to fame as a surgeon, and was by him appointed prosector to the class. He took his surgeon's diploma in 1821; in 1823 he was admitted a Fellow of the Royal College of Edinburgh, and in the former year became a Member of the English College of Surgeons, of which in 1843 he was made a Fellow. From 1825 to 1829 he lectured on surgery in the extra-academical school; and having been refused election as a surgeon of the Royal Infirmary by the managers of that institution, he converted Minto House into a hospital at his own expense in 1829, and delivered for four years a course of prelections within its walls. Here he laid the foundation of that skill and versatile resource in surgery, and that aptitude for clinical teaching, which distinguished him ever after; and here he won the esteem of his fellow-citizens for that generous humanity, of which a notable instance is recorded in the celebrated "Rab and his Friends" of his pupil Dr. John Brown. He contributed to the *Edinburgh Medical and Surgical Journal* a series of reports on the practice pursued in his hospital, and these, as they appeared from time to time between the years 1829–33, were of marked service in advancing surgery as a science and as an art, and in heightening the already high reputation of the Edinburgh school. In 1831 he published his treatise on "The Excision of Diseased Joints"; and in the following year he gave to the world his "Principles of Surgery," which, for its pregnant style and its admirable clearness and force of exposition, will continue to be read even after the very unlikely event of its doctrine being superseded. Curiously, yet characteristically enough, it has shrunk in dimensions, while increasing in value, with each of its many editions; and amongst text-books on surgery it stands alone for its conformity with the Horatian maxim—

> "Servetur ad imum
> Qualis ab incepto processerit, et sibi constet."

In 1833 he succeeded Prof. Russell in the chair of Clinical Surgery in the University—a post which he held, with but a short interregnum, till last year. He had now gained the vantage-ground from which his voice could be heard with authority, and his work be witnessed by competent observers; and here, accordingly, he continued year by year, by the bedside and in the operating theatre, to address an ever-increasing audience of pupils from every quarter of the globe. So high was his reputation, some fourteen years after he had entered on the duties of the chair, that a requisition was made to him by many friends in London to transfer his immediate teaching and influence to the great metropolis. In 1847, accordingly, he removed thither, where the post of Professor of Clinical Surgery in University College awaited him. Unfortunately, however, he came into frequent collision with some of his colleagues and professional brethren—mainly, we believe, his fellow-countrymen; and after much acerbity of spirit had been expended on both sides, he returned to the great seat of learning from which he should never have migrated. Again in the old scenes of his numerous triumphs, he shone forth with all the higher lustre for his temporary estrangement; while his brief sojourn in London had sufficed to attract many students to his clinique from the southern to the northern metropolis. Year by year he sent forth a contingent of enthusiastic pupils and friends, who never failed, on suitable provocation, and before audiences in every region of the world where the English tongue prevails, to assert that he, and he alone, was the giver of such knowledge and skill in surgery as commended itself to their respective communities—an assertion, moreover, which had none the less weight because its authors had supplemented their Scottish academic experience by visits to all the great European schools.

The mere enumeration of his improvements on the surgical practice of his contemporaries amply explains this testimony. In cases of diseased joints he performed resection of the joint, instead of amputating the limb. He was the first to devise and perform amputation of the foot at the ankle-joint—an operation which even in its less scientific form by Pirogoff has saved many limbs, as well as lives, and, according to the statistics of the American war, is less fatal than any other amputation. He demonstrated the success with which the largest tumour of the jaw can be removed by cutting out the entire bone, tumour and all. He suggested the treatment of indolent ulcers of the leg by applying blisters. He showed how, in cases where the lip was destroyed, or had to be removed, from disease, a new lip could be formed; how a new nose could be produced from the cheeks; and how, in cancer of the tongue, the entire organ could be completely and safely extirpated. He revived, with success, the old operation for aneurism by cutting directly into its cavity; while he may claim as distinct and original contributions to his art the operation of external urethrotomy; the enforcement of a non-stimulating diet in cases of senile gangrene; the new and safe method of removing cartilages from the joints; and the demonstration that the periosteum possesses the power of forming new bone—a fact of the most pregnant significance to the surgeon. Against such achievements his errors in judgment (if such they were) are as dust in the balance. And we shall not be suspected of ignoble jealousy in remembering here that he scarcely did justice to the pressure treatment of aneurism till conviction of its efficacy was forced upon him by the Dublin school; that his opposition to resection of the hip

and knee joints was persistent for many years; and that he never adequately appreciated the operation of lithotrity. His thoroughness and candour—candour even in his prejudices, which were neither few nor small—impressed all who came under his influence, and gave him an authority over the minds and habits of his pupils which might have been softened by time and circumstance, but was never lost. This is the more remarkable when we remember that he was simply a man of talent, without a particle of genius, without the least infusion of that *mens divinior*, that θεῖόν τι, which at once explained the popularity of Goodsir, and, in a remarkable degree, that of Simpson. The subtle yet far-reaching insight, the plastic power, which those men possessed over the processes of nature were denied him; but what he lacked in scientific imagination he came very near making up for in masculine penetration and continuity of thought. If he effected few such feats of generalisation as his two younger and more brilliant colleagues, he never planted a false step or pursued a course which he had to retrace. His intellect belonged to the class represented in its highest intensity by the Duke of Wellington, rather than to that similarly represented by Napoleon Buonaparte: sure rather than versatile; relying rather on moderate but invariable success than on splendid victory redeeming splendid failure.

Mr. Syme was not voluminous as an author. Literary composition, under the severely exacting conditions of style which he imposed upon himself, could not but be laborious; and he aimed at impressing his doctrines on the minds of his generation rather by word of mouth than by stroke of pen. Still he has left, in addition to those already enumerated, several most valuable works, such as that on "Diseases of the Rectum," on the "Pathology and Practice of Surgery," on "Stricture of the Urethra and Fistula in Perinæo," on "Incised Wounds," on "Excision of the Scapula," and "Observations on Clinical Surgery." He took, moreover, a very keen interest, as readers of THE LANCET well know, in medical education. He was one of those who contributed, in 1858, to deprive the Town Council of Edinburgh of their patronage of the University Chairs. It was mainly due to him, and to his strong common sense, assisted by a dry humour, which was as racy as it was effective, that the Edinburgh Infirmary will henceforth stand on the admirable site hitherto occupied by George Watson's Hospital; while in medical politics he resisted to the last the concession made by the Medical Bill to the universities and corporations to grant degrees and qualifications independently of the Conjoint Board. Besides these purely professional interests, he had many predilections of an æsthetic and scientific kind, foremost among which must be mentioned his great delight and proficiency in botany, which was the *perfugium et solatium* of many a weary day spent in the clinical wards, the consulting room, or at the academic or public meeting. In the retirement of his residence at the foot of the Blackford Hills, he beguiled his leisure among his flowers and fruits and well-disposed walks, always actively pondering the questions of his science, or of its cognate interests. A better example of the *nobilis in villulâ lucubrans* of Bacon Edinburgh could not exhibit; while his firm and hale figure seemed to give earnest of a lengthened enjoyment of the spectacle. But such a privilege was not to be. Shortly after he had encountered the opponents of the transference of the Infirmary to the site of George Watson's Hospital, and had been rewarded by "victory along the whole line," he sustained a stroke of paralysis which left his power of walking impaired, with little or no manifest mischief, however, to his mind. A second attack, quickly followed by a third and a fourth, prostrated him completely, insomuch that for the last fortnight of his existence he derived what nourishment he could from enemata. His strength sank from point to point, till, on the evening of Sunday, the 26th inst., he expired in his seventy-first year. It is worthy of remark that, like the majority of distinguished Scotchmen of late years, he died from failure of the cerebro-spinal centres,—Sir Walter Scott, Professor Wilson, Professor Alison, Sir William Hamilton, John Goodsir, &c., having all been cut off by disease of that system.

He was buried on Thursday, the 30th ult., in St. John's Episcopal Chapel, of which he was a member. The funeral, though strictly private, in accordance with his own wishes, was attended by about a hundred, chiefly medical, friends.

DANIEL MACLACHLAN, M.D., F.R.C.P.

WE record with much regret the death of Dr. Daniel Maclachlan, retired physician and surgeon of the Royal Hospital, Chelsea, and Deputy Inspector-General of Hospitals, which took place at his residence at Ventnor, Isle of Wight, on the 15th ultimo, after a long illness. Dr. Maclachlan was born at Glasgow, in 1807, and passed his childhood at Oban, in Argyleshire. He received his education at one of the public day-schools of Glasgow, and afterwards at the university of that city. Dr. Maclachan appears to have been a diligent and successful student. He acted for some time as clinical clerk to the distinguished oculist, Dr. William Mackenzie. In 1827, he obtained the diploma of the Royal College of Surgeons of Edinburgh, and in August of the same year entered the Army Medical Department as hospital assistant. Dr. Maclachlan, after a short service on the coast of Africa, was promoted to be assistant-surgeon in the 79th Highlanders, in which regiment he served twelve years. In 1830 he took his degree as M.D. at the University of Glasgow. In May, 1840, he was appointed physician and surgeon to the Royal Hospital at Chelsea, in succession to Dr. Somerville, who had been formerly principal inspector at the Army Medical Board, and for many years physician to the Royal Hospital. On the death of Sir Everard Home, the appointment of surgeon had been amalgamated with that of physician as a measure of economy, and the joint office had been held by Dr. Somerville for about a year when he retired. Dr. Maclachlan filled this post with credit and efficiency till 1863, when bad health compelled him to retire. Since that period he has resided at Ventnor, where he has practised as a physician so far as his health would permit. In the early part of his career Dr. Maclachlan was a frequent contributor to the medical and occasionally to the literary journals; but the work by which he is best known is his "Treatise on the Diseases and Infirmities of Advanced Life," a work based on the experience of twenty years' observation among the old men at Chelsea, and which is probably the clearest and most practical work on the subject in our language. Dr. Maclachlan was a most efficient and zealous officer, unwearying in his attention and kindness to the old soldiers entrusted to his care, and an ardent student of his profession to the very end of his career. He was a Fellow of the Royal College of Physicians, and a Fellow, and at one time one of the Council, of the Royal Medico-Chirurgical Society.

Medical News.

APOTHECARIES' HALL. — The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on June 23rd:—

Evans, Alfred Henry, Nottingham.
Nicholls, Howard Hill John, Kennington-park.
Noott, William Mathias, Cardigan, South Wales.
Pratt, Thomas Gray, Clifton-road, N.W.
Tuck, Frank Sextus, Cresswell-park, Lee, S.E.

At the competitive examination held on June 15th for the prizes in Botany annually given to medical students by the Society of Apothecaries, the successful candidates were:—

1st. Gerald Bomford, of King's College. A Gold Medal.
2nd. Andrew Duncan, of ditto. A Silver Medal and a Book.

QUEEN'S UNIVERSITY IN IRELAND. — At a public meeting of the University held at Dublin Castle on the 22nd of June the following degrees were conferred:—

DOCTOR IN MEDICINE. — Samuel H. Browne, Patrick Doyle, John Dallas Edge, John Gay French, William Frier, Thomas Henry Gillman, Chas. H. Haines, Samuel Johnson, John Alex. M'Cracken, Jeremiah M'Craith, Martin A. M'Donnell, John Maunsell, John O'Neill, Charles Rathborne, James Shaw.

MASTER IN SURGERY. — Robert Lindsay Hunter, Thos. Lumsden, Henry Murray Madden, Samuel H. Browne, John G. French, William Frier, Thomas H. Gillman, Charles H. Haines, Samuel Johnston, John Alex. M'Cracken, Jeremiah M'Craith, John O'Neill, Charles Atkinson Rathborne, James Shaw.

WEDNESDAY in last week was the hottest day we have had in London since the very hot period in July, 1868.

Two deaths from English cholera were returned last week in London.

PROFESSOR ROKITANSKY. — On the 13th of June last, the Academy of Sciences of Paris proceeded to the election of a corresponding member in the section of medicine and surgery in the place of the late M. Panizza. Out of forty votes, Professor Rokitansky obtained 37; M. Lebert, 2; and M. Donders, 1. The Vienna Professor was, therefore, declared duly elected.

DR. MACAULAY, of Canobie, was entertained on Friday, the 24th ult., at a complimentary dinner, and presented with two addresses, and two purses of money, in consideration of the unfair treatment to which he had been subjected during the elections in Dumfriesshire in 1868–69.

Medical Appointments.

ALEXANDER, R. R., M.B., has been appointed Assistant Medical Officer at the Buckinghamshire Lunatic Asylum, Stone, vice Wm. Bevan Lewis, M.R.C.S.E., resigned.

BARRETT, T. B., M.R.C.S.E., has been appointed Medical Officer for the Welshpool District of the newly-formed Forden Union, Montgomeryshire.

DERRY, R. G., M.R.C.S.E., has been appointed Assistant Medical Officer at the Cornwall Lunatic Asylum, Bodmin, vice H. R. Pattinson, M.R.C.S.E., appointed Assistant Medical Officer at the Middlesex Lunatic Asylum, Hanwell.

DICKINSON, E. H., M.B., has been appointed House-Physician to St. George's Hospital, vice F. H. Laking, M.D., whose term of office has expired.

HOLROYD, W. S., M.R.C.S.E., has been appointed House-Surgeon to St. George's Hospital, vice W. E. Cant, M.R.C.S.E., whose term of office has expired.

JESSOP, T. E., F.R.C.S.E., has been appointed a Surgeon to the General Infirmary, Leeds, vice T. Nunneley, F.R.C.S.E., deceased.

KEITH, W., M.D., has been appointed Consulting Surgeon to the Royal Infirmary, Aberdeen, on resigning as Surgeon.

MORTON, T., M.D., has been appointed Medical Officer for the Kilburn District of the Parish of Hampstead.

NOON, Mr. W. M., has been appointed Obstetric Assistant at the Middlesex Hospital, vice Mr. J. Scully, whose appointment has expired.

ROBINSON, E., M.D., Public Vaccinator for the Parish of Birmingham, has been appointed by the Privy Council an Examiner in, and Teacher of, Vaccination.

RUTHERFORD, J., M.D., F.R.C.P.Ed., Assistant Medical Officer of the Borough Lunatic Asylum, Birmingham, has been appointed Medical Superintendent of the Argyll and Bute Lunatic Asylum at Lochgilphead, vice J. Sibbald, M.D., appointed a Deputy Commissioner of Lunacy for Scotland.

STEPHENS, R. F., has been appointed Medical Officer to the No. 2 District of the St. Austell Union.

Births, Marriages, and Deaths.

BIRTHS.

EARLE.—On March 31st, at Wanganin, New Zealand, the wife of Robert C. Earle, M.R.C.S.E., &c., of a daughter.

GRANT.—On the 21st ult., at Westerton, Huntly, N.B., the wife of R. A. P. Grant, Assistant-Surgeon 43rd Light Infantry, of a son.

JORDISON.—On the 29th ult., at Malpas, Cheshire, the wife of Christopher Jordison, L.R.C.P., of a daughter.

SCOWCROFT.—On the 22nd ult., at Manchester-road, Bolton, the wife of John Edwin Scowcroft, L.R.C.P.Ed., of a daughter.

WATSON.—On the 27th ult., at High-road, Tottenham, the wife of W. Tyndale Watson, M.D., of a son.

WINTERBOTHAM.—On the 26th ult., at Bridgwater, the wife of W. L. Winterbotham, M.B., of a daughter.

MARRIAGES.

ANDERSON—TURNER.—On the 28th ult., at St. Peter's Church, Everton, Liverpool, Dr. Collis Latchfield Anderson, son of the late Lieut.-Colonel A. C. Anderson, of Fort Major, Edinboro' Castle, to Sarah Matilda, second daughter of the late Charles Turner, Esq., of the Admiralty, Somerset House.

BOND—HAYES.—On the 28th ult., at Christ Church, Lancaster-gate, Thos. Bond, F.R.C.S., B.Sc. Lond., of Parliament-street, Westminster, to Rosa Sophia, third daughter of the late Mr. Justice Hayes.

BURNHAM—WILLOWS.—On the 25th ult., at the Parish Church, Grimsby, R. Burnham, Surgeon, of Keelby, to Jane Elizabeth Willows, only daughter of the late Mr. C. Willows, of Slattinbro.

POCOCK—BENNETT.—On the 29th ult., at St. Stephen's, Clapham-park, Edward William Pocock, M.R.C.S., eldest son of Dr. Pocock, of Brixton, to Ida Willoughway, eldest daughter of George Bennett, Esq., of "Strelna," Clapham-road.—No Cards.

TAYLER—HICKS.—On the 25th ult., at St. John's Church, Upper Lewisham-road, Francis Thos. Tayler, B.A., M.B., eldest son of Caleb Tayler, M.D., of Upper Lewisham-road, and Maplestreuse Cowden, Kent, to Mary Ann, eldest daughter of Edward Samuel Hicks, Esq., of Rupert Villa, Upper Lewisham-road, New-cross.—No Cards.

DEATHS.

ANGAS.—On the 19th ult., Jonathan Angas, M.R.C.S.E., of Ladbroke-crescent, formerly of Clapham, aged 80.

DONNALL.—On the 10th ult., at Westow-road, Bath, Orlando S. Donnall, M.R.C.S.E., Deputy Inspector-General of Hospitals.

LAWRIE.—On the 17th of April, at Ballarat, Australia, J. T. Brudenell Lawrie, M.D., aged 28.

MURDOCH.—On the 19th ult., at Buckland, near Portsmouth, G. Murdoch, M.B., Assistant-Surgeon R.N., aged 32.

Medical Diary of the Week.

Monday, July 4.

ST. MARK'S HOSPITAL.—Operations, 2 P.M.
ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—2 P.M. General Monthly Meeting.

Tuesday, July 5.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
GUY'S HOSPITAL.—Operations, 1½ P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.

Wednesday, July 6.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
LONDON HOSPITAL.—Operations, 2 P.M.
CANCER HOSPITAL.—Operations, 3 P.M.
OBSTETRICAL SOCIETY OF LONDON.—7 P.M. Council Meeting.—8 P.M. Dr. Rasch, "On Air in the Vagina." — Mr. George Lowe, "On a Case of Hæmorrhage from Retained Placenta after Abortion, terminating fatally."—And other papers by Dr. Routh and Dr. Rogers.

Thursday, July 7.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 3 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

Friday, July 8.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

Saturday, July 9.

ST. THOMAS'S HOSPITAL.—Operations, 9½ A.M.
HOSPITAL FOR WOMEN, Soho-square.—Operations, 9½ A.M.
ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 1½ P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

Notes, Short Comments, and Answers to Correspondents.

BATHS IN LONDON HOSPITALS.

WE rejoice to see that our proposal for the addition of baths to those departments of our hospitals which are specially devoted to the treatment of skin diseases is likely to be generally adopted. The movement has been favourably noticed by some of our political contemporaries. That none of the metropolitan schools in which the rising practitioner is trained should have been furnished with baths for the treatment of cutaneous diseases is far from creditable; but if it is never too late to mend, it is never too soon to begin, and we hope the example shown in one instance will be followed by the other hospitals, so that the poor of London may have the benefits enjoyed by those of Vienna in the cure of diseases so prevalent among the class. It is proposed, if possible, to provide apparatus for disinfecting the clothes of the patients affected by itch and other ailments due to pediculi. The maladies just mentioned might be cured in as many hours as they now take weeks. There is no channel into which liberality could be more properly deflected than this movement for hospital baths.

An Old Subscriber.—The department of "moral hygiene," known as "newspaper cleansing," is progressing rapidly in the metropolis, and will in time extend to the provinces. Our correspondent is thanked for the quack advertisements, the paternity of which is the only "genuine" feature about them. Journals admitting such poison should be publicly proclaimed, if the law is powerless to proscribe them.

Mr. C. A. Wheeler.—A glass eye does not necessarily give a distorted appearance, and there is very slight risk of any such appearance being communicated to children.

W. P. M.—In any case the Bill cannot become law till the 1st of January, 1871.

SICK CLUB FOR PROFESSIONAL MEN.

To the Editor of THE LANCET.

SIR,—I am sorry to appear troublesome; but, being one of those who would be sorry to see a valuable suggestion sink into oblivion, may I venture to ask, has "Tribune" failed in his endeavour to establish the Sick Club for professional men and others? Your obedient servant,

June, 1870. SUBSCRIBER.

The Problem of Ventilation.

The section devoted to the Sanitary Report of the Home Stations in the new Army Medical Blue-book contains some useful and practical observations upon the ventilation of barrack-rooms, a main feature of which consists in providing a certain area of inlet and outlet communication with the open air, specially applied for ventilation, and irrespective of that by windows and doors. It was considered that if these special apertures were open and working, they would afford a removal of air twice every hour; or, in other words, that if 600 cubic feet of space were given per man in a barrack-room, 1200 cubic feet of air would be provided for each occupant per hour. The fulfilment of such a change of air, however, obviously depends on a number of conditions being maintained. It cannot be relied upon, and, practically speaking, it is not always obtained. The men close the Sherringham valves, especially at night, when the fires are out. One way to obviate this would be to supply a larger quantity of fuel, so as to keep the fires alight through some portion of the night. It is, moreover, contended by some—and the results of Dr. de Chaumont's experiments support their opinion—that with 600 cubic feet of air, and this system of ventilation, the air of a barrack-room during winter cannot be maintained sufficiently pure. Nearly 3000 cubic feet of air per head is required to afford purity, and to provide this amount with a cubic space of 600 cubic feet, without draught, would be impracticable. This conclusion is founded upon the results of experiments, especially as to the amount of carbonic-acid impurity in barrack-rooms as compared with the outer air. Assuming that the average proportion in the latter is represented by ·4 per 1000, the amount in a barrack-room, ventilated as described, and with 600 cubic feet for each occupant, will always greatly exceed this. It is found that ·6 per 1000 volumes of carbonic-acid impurity is not appreciable to the senses, but from that to 1·0 is, the latter being decidedly noticeable. Typhus fever and ophthalmia, at one time common amongst troops on home service, are now of very infrequent occurrence; and the deaths from phthisis and hæmoptysis, the mortality from which, in the ten years from 1837 to 1846, was at the rate of 8·7 per 1000, were in 1867 and 1868 but 3·3 and 3·2 per 1000 respectively. The provision of a greater space than 600 cubic feet per man would of course be attended with a large increase of expense, and the Government could scarcely be expected, from the amount of evidence derivable from our present experience, to provide more than 600 cubic feet for each occupant in the sleeping rooms of barracks. But the experiments recently made by Dr. de Chaumont clearly show that, if the condition of the atmosphere in rooms giving this space when occupied, is not satisfactory, when 500 cubic feet are given it is much less so. The excess of impurities in the air of such rooms was "exactly proportional" to the additional number of persons in them. This system of ventilation is considered as independent of doors and windows; but there is no doubt that the shape and construction of the barrack-room greatly influence the character of the ventilation. If the room in its long axis is exposed to the air on two sides, the inlet openings will be on the opposite sides, which is very material. Again, even in winter the windows can be occasionally opened, and in summer they are of the highest value. It has been objected to barracks constructed with windows at opposite sides, that they are too cold in winter from draughts from the opposite windows. If the windows are properly fitted this should not be the case; and if sufficient fuel is provided, the cold should not be excessive. "We have extensive practical experience in Ireland of this form of barrack-room. For instance, Parsonstown and Naas Barracks, and many others, are built on this plan, and complaints of their coldness are not made. There is nothing new in the principle. It may possibly be found expedient in future constructions, in exposed situations, to diminish somewhat the number of windows; but the principle of cross ventilation for barrack-rooms would seem the right one."

Dr. Pavy's letter is in type, and shall appear in our next impression.

The Treatment of Scarlatina.

To the Editor of The Lancet.

Sir,—Three years ago, during an epidemic in this neighbourhood, with the exception of the servants, every member of my family was attacked by scarlatina. I have no doubt but that I was the infecting medium, having had in a few weeks 200 cases under my care.

Country practitioners are more accustomed to hard work than hard talk; but I should like, with your permission, to give my opinion on the relative value of the various treatments prescribed and adopted in this terrible disease.

I must first frankly acknowledge that the epidemic must have been either of a very mild character in this neighbourhood, or that the people were unusually healthy when attacked. I scarcely lost a patient of the whole number attacked, and my treatment was almost purely hygienic only. Regarding the emesis and diarrhœa ushering in the disease as salutary, I did nothing to hinder it, but rather encouraged it by draughts of chilled water. When the emesis and diarrhœa had subsided, I ordered a tepid bath of salt-water, with the best effect. Well-aired and clean linen was then put on the patient, who was confined to his bed or room as I thought fit to order. When any desire for food existed, milk and bread-and-milk were allowed. As convalescence advanced, light broths and jellies were partaken of with advantage. When the throat was much affected, frequent gargling with tepid or warm water and vinegar, or dilute hydrochloric acid, speedily relieved. When possible so to do, free ventilation was everywhere enforced, and all zymotic foci nullified, either by removal when practicable and safe, or by disinfecting measures. In my opinion calomel does harm; for the system is sufficiently taxed by the elimination of the zymotic poison without the addition of a mineral one. I am anxious my rational treatment should be submitted to your notice. Your constant subscriber,

Cley-by-the-Sea, Norfolk, June, 1870. W. Sumpter, M.D.

Medical Reform in the United States.

The *Medical Gazette* of New York has a sensible article on the need of medical reform in America, in the course of which it remarks on the shameful inadequacy of the tuition in many of the American schools. It dwells with emphasis on the urgent necessity of greater stringency in the requirement of preliminary education, and illustrates the defective state of general education by publishing a student's letter received by the publishers of the *Gazette*, in answer to an offer they had made of sending their paper free for one year for clinical reports of cases. We reproduce this letter in the same spirit which led the Editor of the *Gazette* to publish it, who remarks, alas! that he publishes it, not because it is the worst spelled one received, but because the writer hails from an institution from which better things might have been expected. We reprint it for a further reason. We are devising liberal things in the direction of international recognition of degrees and diplomas. We need not say that the only way to further such amenities is for each country to be strict in its own examinations, and to refuse all recognition to students whom it would not like to appear before the Boards and the Medical Societies of other countries. The following is the letter:—

Turner & Mignard —— Mar 2 1870.

Dear Sir,

I observed in your Medical Gazette you would send the Medical Gazette Free for one year to any Student whoe would send you at Different times three Clinical Reports. I know wich to send you three Clinical Reports (Oparations Performed by Prof Pancoat Jefferson Medical College, Philadelphia) Pleas send me from No 1, as soon as Possible and I will send you my first Report in a short time and the other 2 I will send you Accordingly and oblige Your truly —— ——

Parvus.—Our correspondent's first duty is to come to a correct diagnosis as soon as he can, and to convey his opinion to the mistress of the servant, as well as to the servant herself.

The communication of *Dr. Jennings* (Dunster) shall receive early publication.

The Newark Accident.

To the Editor of The Lancet.

Sir,—Below is a medical statement of the persons injured in the late railway accident at Newark. I have sent it thinking it might interest some of your readers.

The number who have died from the effects of the accident up to the present date is 18; 14 were brought dead to the hospital, very much crushed and mutilated; 4 died afterwards.

1st case, that of a stoker, had his thigh completely torn away. As a certain amount of hæmorrhage was going on, it was thought better to amputate. He sank two hours afterwards.

2nd case was that of a man twenty-nine years of age. He had a compound fracture and dislocation of the right knee, a simple fracture of the left leg, and very severe scalp wound, which had opened a branch of the temporal artery, and he presented the appearance of having lost a great deal of blood. After a certain amount of reaction had set in, his thigh was removed at the lower third. Very little blood was lost at the time of the operation; and on taking largely of stimulants, he rallied for a time, but afterwards became more exhausted, and sank fourteen hours after admission.

3rd case, a compound comminuted fracture of left thigh, severe laceration of back, severe scalp wound, and bad cut on face. This patient never sufficiently rallied to justify any surgical proceeding, but died twelve hours after admission. The infant of this person was taken charge of at the station. Although eighteen months old, it was still at the breast. It had a severe lacerated wound on one arm, and a slight contusion on the head. The child appeared to be doing well for some hours; but afterwards diarrhœa set in, and it died rather suddenly on the following day.

There are still 12 remaining in the town, more or less injured. At the hospital, 3 males and 4 females.

Males.

1. Dislocation of left hip, followed by retention of urine. Doing well.
2. Concussion of spine. Doing well.
3. Lacerated wound of leg, fracture of forearm, severe contusion over sacrum, contusion over eye, &c. Doing well.

Females.

1. Bruise over instep, slight contusion of side. Doing well.
2. Contusion over lower part of back, severe injury over left eye, great nervous shock, retention of urine. Symptoms not altogether favourable.
3. Severe laceration of calf of right leg. Doing well.
4. Contusion of hip. Doing well.

The rest are at the inns in the town.

1. Wound of scalp, fracture of nasal bones, wound of thigh, bruise over ankle. Doing well.
2. Amputation of four toes. Doing well.
3. Concussion of brain. Gradually recovering consciousness.
4. Contusion over legs and side. Doing well.
5. Injury over upper part of spine. The subject of this injury is a Polish Jew. He had great difficulty of swallowing for some days, and it was not easy to determine whether this arose from injury to the cord, or whether it was the result of nervous shock. From the fact of the difficulty being gradually overcome, I am disposed to think the latter is the cause. He is gradually improving.

A great many others received various cuts and contusions, but proceeded on their way home. Yours faithfully,

S. Jon,
Surgeon, Newark District, Great Northern Railway,
Senior Surgeon, Newark Hospital.

Newark, June 29th, 1870.

Mr. J. Horsfall (Leeds) is thanked; but we have only to do with professional brethren on the Register, and "Charles Rooke, M.D., Scarborough," is not to be found there.

Theodosius Parland must gladden the hearts of all opponents of the dogma of Mesmer by his very peculiar advocacy of the same.

Dr. G. Hunter (Linlithgow) should address his inquiry to the inventor.

PLAYING WITH EDGED TOOLS.

IN December last we were favoured with a pamphlet, entitled "Notes on the Principles of Population," by a Mr. Andrew Watt, of Montreal. On perusal we very soon discovered that the author had, as is not uncommon, more confidence in himself than knowledge of his subject. To be brief, we may say that Mr. Watt's object was to show that on questions of population and death-rates, the English and Scotch Registrars-General, the President of the English Institute of Actuaries, Dr. Farr, *The Times*, the *Pall Mall Gazette*, &c. &c., were blundering tyros, whom it was his mission to instruct. Resisting a not unnatural temptation to take people of this lofty stamp for what they profess to be, we investigated a little, and soon were satisfied that English statists and journalists had not much to learn of Mr. Watt, whose pamphlet was merely a *réchauffé* of old and well-known doctrines in vital statistics, strangely muddled up with crude and questionable notions of his own; and as, on the whole, we felt it would have been small loss to science had Mr. Watt allowed his lucubrations to remain buried in the columns of the Canadian newspapers, where they originally appeared, we concluded to pass him by without notice in this journal. Three or four months subsequently we received another copy of this pamphlet, with a letter from Mr. Watt, containing the modest request that we would reprint in THE LANCET four or five tables of figures, with a number of extracts, to which our attention was directed. Again we refrained from exposing the writer's obvious incapacity to handle his subject, though the temptation was strong, inasmuch as, to our amazement, a well-known medical officer of health in this country had adopted in his own Annual Report some of Mr. Watt's crudest propositions. But human nature refuses to endure a third dose of this stuff; and so, as we open a letter in a handwriting which we recognise, and find a certain "Inquirer" asking us to give a place in our columns to two long letters on a familiar theme that he has managed to get into the *Glasgow Herald*, we are moved to say that these thrice-told tales are as foolish to persons with a knowledge of the subject as they are calculated to mislead the public, who take such things on trust. The assertions about the fallacies of the Registrar-General's Reports come with bad grace from a writer who has given abundant proofs that he only knows those Reports at second-hand. He professes to quote as the key to one of his positions a sentence from one of Dr. Farr's Reports, which sentence we have ascertained to be, and we say advisedly is, a stupid fabrication. He attempts to criticise a method of calculation without knowing in the least degree what that method really is; and the way in which he lugs in—the term is strictly in keeping—authorities (ourselves among the number) which he imagines support his case is altogether ludicrous; what he cites from us proving clearly that he does not understand what he is writing about. He is apparently unaware that an official answer has been made to his allegations about the fallacies of our death statistics; and as notoriety in one way or another seems to be his object, he will, no doubt, go on reiterating his odd notions as long as any newspaper can be induced to print them.

J. W., (Cardiff.)—The two diseases are quite distinct: albumen being almost invariably present in the urine of patients suffering from the one, and almost never in that of patients suffering from the other.

A County Magistrate had better use enamelled pipes.

ECCHYMOSIS FOLLOWING A BLOW.

To the Editor of THE LANCET.

SIR,—Taylor, in his "Medical Jurisprudence," says: "A medical jurist must guard against the error of supposing that when a blow has been inflicted on a living person, it is necessary that the individual who is maltreated should survive for a certain period in order that ecchymosis should be produced," mentioning the case of the Duchess of Praslin as an instance.

Casper, in his "Forensic Medicine," says quite the reverse: "That it is the rule in all such inquiries as are followed by *instant or very sudden death* for the body to *exhibit no external appearance of violence*, presupposing, of course, that the origin of the injury be not of itself of a penetrating nature, because during the short remaining life of the wounded person there is no time for the production of ecchymosis," enumerating several cases of most important internal injuries without any external trace of violence.

There being such great discrepancy between two great works, which should be the guide for the medical jurist?

A case has recently occurred in this neighbourhood, in which a young man has been committed for manslaughter, he being one of a party returning from St. Columb on the 24th ultimo in a waggonette, where some quarrelling took place, he was seen to strike Mr. Dinnis, one of his companions, who died very suddenly. A post-mortem examination revealed the mark of a bruise over the sixth and seventh ribs on the right side. It so happens that Mr. Dinnis was present at a fire about a fortnight before this happened, when a heavy box fell on his right side, knocking him senseless, and nearly killing him, from his own account afterwards.

Now, the question is, whether the injury causing the bruise in Dinnis's right side might not have occurred at the *fire*. According to Casper, it could not have occurred in the *waggonette*, as there would be no mark of a blow given just before death; but Taylor says the contrary, that the bruise *may have been caused* by the blow given just before death.

Your obedient servant,

Falmouth, June 23rd, 1870. T. STOKES GUPPY, M.D.

Mr. Metcalfe Johnson is congratulated on the Privy Council's recognition of his efficiency as a vaccinator. The other matters referred to shall receive consideration.

J. J. M.—Thanks. We were aware of the information contained in the work referred to.

Mr. A. T. A. Brooster.—We wish our correspondent could have sent us a more satisfactory refutation of Mr. H. Evans's statements.

THE ST. PANCRAS GUARDIANS AND ONE OF THEIR MEDICAL OFFICERS.

Mr. John Wickham Barnes may feel grateful to Mr. Joseph Salter for his attack upon him at the Board, every point of which was so effectively repulsed. It is not every Poor-law medical officer who could furnish an answer to trumpery charges by a censorious guardian by saying that he had never neglected a single case belonging to the parish. Mr. Salter's case against Mr. Barnes was entirely pointless and impertinent in consequence of this circumstance. So long as he could not bring forward one case of neglect, what business was it of Mr. Salter that Mr. Barnes chose to have patients in the City, and to be connected with a provident dispensary?

Indignans is thanked for his enclosure; but we fear all idea of redress must be postponed till medical legislation becomes more efficient.

REGULATIONS FOR STORING POISONS.

To the Editor of THE LANCET.

SIR,—I observe with satisfaction your article upon the recent refusal of the Pharmaceutical Society to adopt the regulations for storing poisons proposed by its late Council. As an opponent of the regulations, my satisfaction arises from the certainty that when the question is pushed to its legitimate conclusion, the powerful voice of THE LANCET will be opposed to such false safeguards as have just been rejected.

Primâ facie, the opponents of the measure had a strong case in the fact that at no public meeting called to consider the question had the regulations found a single advocate beyond the members of Council who framed them. Such meetings are reported by the press from fourteen of the leading towns of England and Scotland, and they expressed unanimous and strong condemnation. If our body is fit to be entrusted with its present representative government, its members must be competent to offer an opinion on the probable working of the proposed regulations.

No decision has been expressed upon the general question whether it is desirable or not to regulate the storing of poisons. A definite code was proposed, considered, and rejected on its own merits. The regulations took as a basis the legal "poisons" of the Pharmacy Act of 1868, comprising arsenic, aconite, belladonna, hydrocyanic acid, opium, strychnine, &c. &c., *and their preparations*—a list which has been computed to include about two hundred articles. It was ordered that each of these should be labeled "Poison"—a rather clumsy way of cautioning the dispenser, and inducing a patient to decline a dose which he had seen drawn from three or four bottles with such ominous labels. It was further ordered that "dangerous" or "poisonous" articles must be kept in one of three ways—viz., in a special compartment, in a bottle of distinctive shape, or in one distinctively fastened over. One of the weakest points of the regulations came out in the discussion, when their advocates admitted that every chemist was to decide for himself what was "dangerous," the legal schedule of poisons being coolly ignored by an ex-President, who said that he did not treat tinct. camph. co. as being a preparation of opium! Finally, all lotions and liniments were ordered to be issued to patients in distinctive bottles, having peculiarities perceptible to touch. The objection to this clause bore especially upon the practice of the medical profession; for it was argued that in the provinces more medicine came from surgeries than from the pharmacy of the chemist; and to compel the chemist to use special bottles for lotions, &c., under a penalty of £5, whilst the surgeon issued any bottle he chose, would create gross confusion in the public mind, and cause more accidents than it prevented.

Every chemist who does much dispensing adopts for himself some system of storing poisons; but he need not as a consequence accept a very faulty code under the penalty of £5 for every breach, and the chance of ruin as the further consequence of a public conviction. Beyond this, such a system necessarily involved inspection by a State police, and to this point our body has not yet been "educated."

Permit me, Mr. Editor, to conclude by saying, *Do ut fabula narretur!* If the medical press demands, in the interest of the public, such regulations for the control of one class of legally qualified dispensers, what plea can the medical profession put in for exemption from the same regulations, penalties, and inspection? Clearly, the answer is, None. I therefore claim that those who have defeated the regulations have served the best interests of the medical profession, as well as those of the public and themselves.

Yours respectfully,

Briggate, Leeds, June 13th, 1870. RICH. REYNOLDS.

TREATMENT OF LUMBAGO.

M.B. Aberd. has almost invariably found lumbago yield to Dover's powder at bedtime; warm bath or (better still) Turkish bath twice a week; bicarbonate of potassium in fifteen or twenty grain doses, sometimes with colchicum or hyoscyamus, or both; and the local application of a piece of wash-leather, lined (if preferred) with thin flannel, to be changed for another, clean and dry, as often as it becomes saturated with perspiration. The warm, or especially the Turkish, bath may at first increase the pain while the patient is using it, or even for a short time after; but by persevering in its use it will be found of much benefit.

Dr. K. Corbet (Beauly) is thanked; but the stolid fanaticism of the latter is its best antidote.

Materfamilias.—It is our rule to refrain from prescribing. Take the advice of the family medical man.

TRIAL OF BOULTON AND PARK.

To the Editor of THE LANCET.

SIR,—Whether, as you suggest, it will be well for the Government to seek the services of foreign medical jurists as experts in the above case, is a point on which I do not presume to offer an opinion. One of the most learned of foreign medical jurists has not long since been removed by death in the person of Johann Ludwig Casper, of Berlin; but, though the author is no more, there remains yet chap. iii., p. 329, of his third volume—a chapter distasteful and disgusting of perusal, yet full of information on matters respecting which, I believe, the medical profession in this country are happily rather ignorant.

I am, Sir, yours obediently,

June 29th, 1870. J. C. T.

THE NEMESIS OF NON-VACCINATION.

AT Brooklyn, U.S., the Board of Health announces that 56 cases of small-pox occurred during May, and that 5 victims to the same distemper died in the week ending June 4th. The German quarter—never characterised by excess of cleanliness—in the east district of Brooklyn was the point of most virulent attack, while the health officers encountered the greatest difficulty in inducing the friends of the patients to have them removed from their overcrowded dwellings to the public hospitals. It is almost superfluous to add that, as in most American towns, compulsory vaccination is resented and resisted as an interference with the liberty of the subject.

THE ARMY MEDICAL SERVICE.

To the Editor of THE LANCET.

SIR,—As I hear that there is some "hitch" in the Warrant which was shortly expected for the army medical department, and that there is a chance of it not appearing at all, will you allow me to place before you the extremely unpleasant position which regimental medical officers now hold.

By a recent decision of the authorities, and by a published circular order, "medical officers are not to be considered as on the establishment of regiments." Therefore they do not belong to, or form part of, any regiment; notwithstanding they are kindly permitted to wear the uniform and pay the subscriptions of the corps to which they are attached, and are called on to attend parades of the regiment—a perfectly useless and distasteful performance, and one which occasionally causes the hospital duties to be hurried over, especially where there is only a single medical officer, which is very frequently the case at present.

Now, Sir, I ask you is this fair on the part of the authorities? If the medical department is to be a general staff, or if the regimental system is to be continued, let either plan be adopted at once; but do not keep a large number of officers, many of us of long service, in the ridiculous position which we now hold. The colonels of regiments really do not know how to class us; and in matters of invitation by other regiments, or in general society, we cannot surely accept such, not belonging to the regiment. In fact (as "Lord Dundreary" says), no fellow could understand, by any possibility, what position those medical officers now hold whose names appear in the Army List appended to the tail of each regiment; at all events, it is a miserably unpleasant position, and one which is well discussed by, and known to, everybody.

I shall not enter into the subject of the abolishment of regimental medical officers further than to say that I think the few advantages to be gained by it will never counterbalance those of the social position and pleasant home regimental officers formerly enjoyed, nor will the regiments themselves be in any way benefited by the change; quite the contrary.

I am, Sir, your obedient servant,

A (REGIMENTAL?) MEDICAL OFFICER OF LONG SERVICE.

London, June 13th, 1870.

We have received from *Dr. Prothero Smith* another letter on the subject of his claim to have preceded Dr. Dieulafoy in the invention of the pneumatic aspirator; but we think that no benefit could result from its publication. The instruments of both inventors have now been described and figured in our columns. That of Dr. Dieulafoy is patented, and the question really has reference to the validity of a patent rather than to a matter of scientific interest.

ROTHERHAM HOSPITAL AND DISPENSARY.

To the Editor of THE LANCET.

SIR,—As we have suddenly lost our late house-apothecary, and advertised for a fully qualified house-surgeon, I take this opportunity of saying (for the benefit of candidates for the office) that the new hospital, which is now erecting, with every sanitary improvement and the best arrangement for ventilation, will be ready for occupation in about twelve months; and the probability is much in favour of the dispensary house-surgeon being elected to the hospital, if his qualifications and character are satisfactory to the medical staff, although the rules of the dispensary will not admit of such election at present. Yours faithfully,

Rotherham, June 28th, 1870. E. J. SHEARMAN, M.D.

QUINOVATE OF LIME.

IN our notice of this preparation we ought to have said that the following formula has been substituted for that originally employed. When quinovate of lime is taken internally, it is readily decomposed by the acids of the stomach. It can be administered as a powder, mixed with a little sugar of milk or phosphate of lime, or in the form of solution; the latter has been found to be the most convenient form of exhibition.

"FORMULA FOR SOLUTION.—Calcis quinovatis, 96 grains; pulv. tragacanth., 12 grains; acid. phosph. dil., q. s.; aquæ, 6 ounces. Rub together the quinovate of lime and the powdered tragacanth with the water; add the dilute phosphoric acid drop by drop, until the quinovic acid separates in a finely divided state, which may be recognised when the mixture has a slight acid reaction on litmus paper, and assumes a gelatinous condition. Dose from one drachm to four drachms every hour."

Mr. P. Quain.—We will inquire.

A Hospital Visitor is informed that the substance of his letter having already appeared in *The Times*, it cannot be republished in THE LANCET.

THE EXAMINATIONS AT THE COLLEGE OF SURGEONS.

To the Editor of THE LANCET.

SIR,—It must be satisfactory to the members of our profession to learn from your very interesting reports that the examinations of our College of Surgeons are so searching and practical as regards the anatomical knowledge of the candidates. I wish, however, to direct your attention, and that of the Council of the College, to the fact that, although the primary examination professes to deal with anatomy and physiology, the candidates were not indulged with a single physiological question. We all know that a knowledge of physiology is almost as essential to the surgeon as a knowledge of anatomy, and I am quite sure it is only necessary to direct your attention to its absence from the College of Surgeons' examination to have the defect rectified. Your obedient servant,

June, 1870. AN M.B. LOND.

El Nino.—Papers aiming at the prizes of the Paris Academy of Medicine should be sent before March 1st of each year, and addressed to "Monsieur le Secrétaire de l'Académie Impériale de Médecine, Rue des Saints Pères, Paris." They must be written in French or Latin, and accompanied by a *sealed* letter with a motto, containing the name and address of the author. However, candidates for the prix d'Ourches, d'Argenteuil, Itard, Godard, Barbier, and Amussat are not subjected to the restriction touching the secrecy of name.

R. McK., (Cromer.)—The qualifications specified are quite sufficient for the appointment referred to.

Mr. J. Watson (Chelsea) is thanked. The "doctor" should be brought under the notice of the Medical Council.

Amicus.—We regret that we are unable to say when the vacant Inspectorship will be filled up.

CORRIGENDA.—In Dr. Ballantyne's paper in our last number, page 823, line 12 from bottom of first column, for "grains," read *drachms*. Also in the same column, the last complete sentence, commencing "Since 12 o'clock," should be omitted there, and substituted for the second sentence, commencing "Chloral," in the first paragraph in the next column.

COMMUNICATIONS, LETTERS, &c., have been received from — Dr. Gull; Mr. F. C. Skey; Dr. Grailly Hewitt; Mr. Gamgee, Birmingham; Dr. Vinen; Dr. Henry Bennet; Mr. Spencer Watson; Dr. Snow Beck; Mr. Johnson, Lancaster; Mr. Walker; Dr. Protheroe Smith; Mr. Wilson, Birmingham; Mr. Peel; Dr. Rogers; Mr. Lyon; Dr. Stephens, St. Austell; Mr. Turner; Dr. Chinery, Lymington; Dr. Willing, Great Wakering; Dr. Armstrong, Cork; Mr. Thomas; Mr. Marshall; Mr. Burnham, Keelby; Mr. Simpson; Mr. Williams; Dr. Heywood Smith; Dr. Crisp, Holywell; Dr. Rutherford, Edinburgh; Mr. Balls, Bexworthy; Mr. Davies; Mr. H. Smith; Mr. Jones, Long Melford; Mr. Constable; Mr. Townley; Messrs. Fox and Co., Manchester; Dr. Dudfield; Mr. Manby; Mr. Bell; Mr. Dixie; Mr. Commins; Dr. Jordison, Malpas; Mr. Job, Newark; Mr. Hicks; Mr. Macrae, Perth; Mr. Bryan; Mr. Bennett; Mr. Howlah, Leeds; Dr. Robert Lee; Dr. Guppy, Falmouth; Mr. Broster; Mr. E. Smith; Mr. Atkins; Mr. R. Mersthams; Dr. Jennings, Dunster; Dr. Scowcroft, Bolton; Mr. Roberts, Donington; Mr. Matthews; Mr. Dunwardie, Kensington; Dr. Liebreich; Mr. Barnes, Carlisle; Dr. Sumpter; Mr. Winterbotham, Bridgwater; Mr. R. C. Earle, Wanganui, New Zealand; Dr. Miller, Melksham; Dr. Bower; Mr. Milner; Mr. Purland; Mr. Hill; Dr. Martyn, Malvern; Dr. MacCormac, Dublin; Dr. Garlick; Messrs. Maw, Son, and Thompson; Mr. Rudd; Dr. Martin, Clogheen; Mr. Gillespie; Mr. Knight; Mr. W. Adams; Mr. W. Howarth; Mr. Harper; Dr. Allan, Bonar Bridge; Mr. Key; Miss Blake; Mr. Percy; Dr. Ogilvie Mill; Mr. Galton; Mr. Morgan; Dr. Goodhart; Dr. Holman; Messrs. O'Byrne Brothers; Dr. Watson, Tottenham; Mr. Parrott, Enfield; Dr. Shearman, Rotherham; Mr. Corke, Stoke Newington; Mr. M'Kelvie, Cromer; Dr. Gervis; Mr. J. Winstone, Cardiff; Dr. Nyhan, Drimoleague; Mr. Webb; Mr. Cardington, Rochester; Mr. Robinson, Ayr; Dr. Nicholls, Chelmsford; Mr. Waterton; Mr. Summers, St. Leonards; Mr. A. Bean; Mr. Murray, Manchester; Mr. Mitchell, Bristol; Dr. Hunter, Linlithgow; Dr. Richards; Mr. Hillyer; Mr. Sewell; Dr. Philpots; Dr. T. R. Adams, Croydon; Mr. Hughes; Mr. Moore; Dr. Gaitskell; Mr. Binkersteth, Liverpool; Mr. Crawley; Mr. Holden; Mr. Evershed, Arundel; Dr. Tidy; Dr. Mackellan, Tarbert; Mr. Wright, Leeds; Dr. Sawyer, Birmingham; Mr. Williams, Talgarth; Mr. Nicholls, Gunnislake; Mr. Plum, Worcester; Dr. Thomson, Torquay; Mrs. Bruorton, Lynn; Mr. Prowse, Amersham; Mr. Crossman, Hanbrook; Mr. Smith, Shirley; Mr. Burton; Mr. Steele; Dr. Moryon; Mr. M'Donnell; Dr. Mosson, New South Wales; Dr. Liveing; Mr. Maynard; Dr. Bowes, Stafford; Dr. Long, Macclesfield; Mr. Palmer; Dr. Bettelheim, Wien; Dr. Fergus, Marlborough; Mr. Bennett; Dr. Kelly, Crook; Dr. Shea, Dublin; Cymro; The President of the Royal College of Physicians; C. R.; A Surgeon; H. S.; M.D.; An Old Subscriber; H. M.; Western Medical and Surgical Society of London; ——, Mhow; Inquirer; Anthropological Society; M.D., Brussels; &c. &c.

Manchester Examiner, Flintshire Observer, Cincinnati Medical Repertory, Journal of the Scottish Meteorological Society, Edinburgh Daily Review, Brighton Guardian, Parochial Critic, Inverness Advertiser, Medical Temperance Journal, North Middlesex Chronicle, New York Medical Gazette, North Wales Chronicle, Tavistock Gazette, Glasgow Herald, Brighton Gazette, Leamington Spa Courier, New York Medical Gazette, Croydon Chronicle, Age (Melbourne), *El Eco de las Ciencias Medicas, Scarborough Gazette*, and *Liverpool Albion* have been received.

TERMS OF SUBSCRIPTION TO THE LANCET.

UNSTAMPED.				STAMPED. (*Free by post.*)			
One Year	£1	10	4	One Year	£1	14	8
Six Months	0	15	2	Six Months	0	17	4
Three Months	0	7	7	Three Months	0	8	8

Post-office Orders in payment should be addressed to JOHN CHAPMAN, THE LANCET Office, 423, Strand, London, and made payable to him at the Post-office, Charing-cross.

TERMS FOR ADVERTISING IN THE LANCET.

For 7 lines and under	£0	4	6	For half a page	£2	12	0
For every additional line	0	0	6	For a page	5	0	0

The average number of words in each line is eleven.

Advertisements (to ensure insertion the same week) should be delivered at the Office not later than Wednesday; those from the country must be accompanied by a remittance.